

# **Transmitters DTMB**

Product Catalogue 20 2013



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Screen Service is a worldwide known company focused on turn key and end-to-end solutions for all broadcaster needs.

With more than 20 years of experience and thousands of satisfied customers, Screen Service is the leading company in digital TV technology.



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# Historical Milestones

# 1980s

In the late 1980s Screen Service Italia (SSI) was founded in Brescia. It was active in management, assistance and trading of TV-radio systems, radio transmitters and other electronic equipment.

# 1990s

- SSI starts internal production of TV Transmitters and Microwave Links.
- Strategic partnership with M.B. International Srl, broadens its product portfolio with digital broadcasting technology.

# 2000s

- **2004:** SSI acquires a 39% stake in Innovaction S.r.I., a company which operates in projects and prototypes of electronics and transmission equipment.
- 2004: Cape Natexis Private Equity Fund (CNPEF) and Fondamenta acquired a 60% stake in the company through SSBT S.p.A.
- 2005: SSBT incorporates Screen Service America (SSA).
- 2005: SSBT acquires the entire capital of M.B. International Telecom Labs S.r.I. (MBITL), a spin-off of M.B. International S.r.I.
  - Screen Service System (SSS) is incorporated, entering into the system integration business with an opportunistic approach.
- 11-Jun-2007: first day listed on the Milan Stock Exchange "Expandi Market".
  - Jun-2007: MBITL signs agreement with Xilinx (NASDAQ XLNX) as R&D partner for the development of several protocols in order to allow IPTV (Internet Protocol Television) to function on Xilinx's Platform.
  - Jun-2007: Screenlogix is established and is expected to be involved in the development of a new generation of Hi-speed SuperComputers for number crunching, virtual servers and com-

- Oct-2007: SSBT acquires order from an important System Integrator for the supply of innovative transmitters for the broadcasting of digital terrestrial TV and mobile TV, manufactured according to the Software Defined Transmitter (SWDT) technology. The order has a value of approx. 16 million Euros.
- Oct-2007: MBITL signs agreement with a major company, S&P 500 listed to develop software on embedded/digital signal processing family by utilizing the concept of "Software Defined Radio" of which MBITL is a pioneer.
- At the end of January 2008, Screen Service do Brasil (SSB) is incorporated and is already in a position to deliver the ISDB-T standard (also used in Japan) that has been adopted in Brazil for digital transmission.
- Mar-2008: record contract signed with RRD and Profit Group worth 14,5 million Euros (duration of 30 months w.e.f. 1-Apr-2008) for the supply of DVB-T equipment necessary to complete and define the digitalization process of the interregional broad-casters controlled by Profit Group.
- Mar-2008: financial loan of 8 million Euro granted to Profit Group (expired date 17-Mar-2011) which entitles SSBT to be the privileged supplier (first call-last refusal) of equipment necessary to the construction of the Wi-Max network of the following Italian Regions: Liguria, Toscana and the Province of Trento.
- Mar-2008: a call option has been granted by Profit Group for the purchase of 30% of share capital of RRD, leader in the supply of large scale solution in DVB-H technology. It can be exercised within March 2011 at a price of 7 million Euros.
- SCREEN SERVICE acquires 100% of RRD Reti Radiotelevisive Digitali S.r.l., a leader in the broadcast and telecommunications services industry.
- Screen Service and RRD play a primary role in the definition of the new standard for the US market, ATSC Mobile DTV (A/153), collaborating with OMVC (Open Mobile Video Coalition) and offering a complete high reliability end-to-end solution.

II puter graphics.



# 2010s

- · Screen Service founds Skylinks, a newco with a long background of experiences in High Capacity Microwave Systems. Its product portfolio covers the broadcast needs but also telecom, defense, healthcare and many others.
- Tivuitalia becomes an officially authorized Italian Nationwide Network Operator.



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# SDT ARK-6 Series



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# The Multiple Configuration Flexible Hardware Platform

# The SDT ARK-6 is a Universal Driver with Multiple Front-End Boards

# SDT ARK-6 SERIES. All configurations

Available front end configurations: Transmitter only Satellite Receiver Input Satellite Receiver with Decoder and CAM Input Analog A/V Input Regenerative Trasmitter





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| Specifications  |                                   |  |
|---|-----------------------------------|--|
| Frequency range   | UHF (Band IV/V)<br>VHF (Band III) | 470 to 862 MHz, in 1 Hz Step   |
|   |                                   |  |
| Available standards<br>(all standars are full<br>compliant) | Digital TV                        | DVB-T, DVB-T2, DVB-H, ISDB-Tb, ATSC, ATSC Mobile<br>DTV ,DTMB                                |
|   | Digital Audio Broadcasting        | DAB,DAB+,T-DMB   |
|   | Analog TV                         | B/G, D/K, M, M1, N, I, I1  |
| Power Supply  | AC Line Voltage                   | 380 to 415 (3 phases), 208 to 240 Delta or Star ; 47<br>Hz to 63 Hz To be specify at order   |
|   | AC Line variations                | +/- 15%  |
|   | Power factor                      | ≥ 0,98   |
| <u> </u>  |                                   |  |
| Conditions  | Altitude                          | 2500 m above sea level (> 2500 m on request)   |
|   | Operating temperature range       | -10 °C to +45 °C at sea level, upper limit derated of 2<br>°C per 300 m Above Mean Sea Level |
|   | Relative humidity                 | 95 %, not-condensing   |
|   | Cooling method                    | Forced Air / liquid with external heat exchanger with redounded fan                          |
| DE output   | Output nower veriation range      | +0.5 to 10.4P  |
| κε ουιραι   | BE load impedance                 | +0,510-1000  |
|   |                                   | Power reduction after exceeding the set value or   |
|   | VSWR                              | switch off after three attempts  |
|   | RF Output connector               | See Specific Data Sheet  |
| Transmitter size  | Rack Unit                         | See Model Specific Data Sheet  |
|   | Weight                            |  |
|   | Dimension                         |  |
| Synchronization   | Reference frequency               | 10 MHz 0.1 V to 5 V (Vpp) or TTL_BNC   |
| Synchronization   | Reference pulse                   |  |
|   |                                   |  |
| Operations Control and<br>Monitoring                        | Remote                            | Web based Java Interface   |
|   |                                   | SNMP   |
|   |                                   | Telnet access via ethernet   |
|   |                                   | Extensive front panel control  |
|   |                                   | Local terminal on RS232  |
| Compliance and  |                                   |  |
| Conformity  | RoHS                              | 2002/95/EC   |
|   | KtllF                             | 1999/5/EC<br>EN 60215  |
|   |                                   | EN 00215<br>EN 201_4201_1  |
|   | FCC                               | Part 73  |
|   | WEEE                              | 2002/96/EC   |
|   | Manufacturing                     | ISO 9001:2008  |
|   |                                   |  |
| A   |                                   | Specifications are subject to change without notice  |
| ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~                      |                                   | UI UU UU   |

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| Analog TV | standards                  | B/G, D/K, M, M1, N, I, I1                           |  |  |  |  |  |
|-----------|----------------------------|---|--|--|--|--|--|
|           | Color transmission         | PAL, NTSC, SECAM                                    |  |  |  |  |  |
|           |                            | IRT dual-sound coding, FM single sound and NICAM728 |  |  |  |  |  |
|           | Sound transmission         | (13 dB/20 dB), FM single sound(-10 dB)              |  |  |  |  |  |
|           | Inputs                     | 1 x video , 2 x audio                               |  |  |  |  |  |
|           |                            |   |  |  |  |  |  |
| Video     | Video input                | 0,5 to 1,5 V  |  |  |  |  |  |
|           | Regulation of output power | +/- 3%  |  |  |  |  |  |
|           | Variation of output power  | +/- 2%  |  |  |  |  |  |
|           | Differential gain          | 3%  |  |  |  |  |  |
|           | Differential phase         | 3°  |  |  |  |  |  |
|           | Low frequency linearity    | 8%  |  |  |  |  |  |
|           | ICPM                       | +/- 2°  |  |  |  |  |  |
|           | S/N                        | >60 dB  |  |  |  |  |  |
|           | K Factor                   | 2%  |  |  |  |  |  |
|           | 20 T                       | 3%  |  |  |  |  |  |
|           | Spourius and Harmonics     |   |  |  |  |  |  |
|           | radiation                  | >00 ub  |  |  |  |  |  |
|           | In Channel IMD             | > 58 dB   |  |  |  |  |  |
|           |                            |   |  |  |  |  |  |
| Sound     | Modulation capability      | +/- 120 KHz   |  |  |  |  |  |
|           | Monoaural input            | settable 0 to 12 dBm                                |  |  |  |  |  |
|           | Pre-Emphasys               | 75 / 50 μS  |  |  |  |  |  |
|           | Frequency response         | +/- 0,5 dB 30 to 15000 Hz                           |  |  |  |  |  |
|           | Harmonic distorsion        | 0,5% 30 to 15000 Hz                                 |  |  |  |  |  |
|           | FM Noise                   | 60 dB with de-emphasis                              |  |  |  |  |  |
|           | AM Noise                   | 50 dB 30 to 15000 Hz                                |  |  |  |  |  |
|           | Synchronous AM noise       | 40 dB   |  |  |  |  |  |
|           | IRT Sound                  | available   |  |  |  |  |  |
|           | NICAM Sound                | available   |  |  |  |  |  |

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# SDT ARK-6 SERIES

The Universal DRIVER can be customised in 5 different configurations. All, always and easily upgradable to new features.



The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology. We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package. It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, an heterodyne transposer, a regenerative transmitter, all in a single hardware. ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV modulations. The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control. It could be used as an exciter in a system or like standalone transmitter in several compact solution. The STD ARK 6 transmitters have a compact design. They are 19" wide, occupy 1 rack unit and contain all basic components such as transmitter input unit, modulator unit, output stage module, and display plus keypad. The housing fan is attached outside for easy access. In addition, the transmitters can accommodate a variety of options. The transmitters can be set up wherever required and are easy to transport. The broadband output stages are based on powerful LDMOS transistors and feature high efficiency.

| Front Find                      | STANDARD                           |   |   |   |   |   |  |  |  |  |
|---------------------------------|------------------------------------|---|---|---|---|---|--|--|--|--|
| Front-End                       | ATV                                | DVB-T/H   | DVB-T2  | ISDBT   | ATSC  | DMBT  |  |  |  |  |
| None                            | Transmitter                        | Transmitter   | Transmitter   | Transmitter   | Transmitter   | Transmitter   |  |  |  |  |
| Digitalizer A/V<br>Input option | Transmitter with A/V analog inputs | Х   | Х   | Х   | Х   | Х   |  |  |  |  |
| DVB-S/S2                        | Х                                  | Transmitter with<br>DVB-S/S2 RF input   | Transmitter with<br>DVB-S/S2 RF input   | Transmitter with<br>DVB-S/S2 RF input   | Transmitter with<br>DVB-S/S2 RF input               | Transmitter with<br>DVB-S/S2 RF input   |  |  |  |  |
| DVB-S/S2 +<br>CAM               | Х                                  | Transmitter with<br>DVB-S/S2 RF input<br>(with CAM)                                   | Transmitter with<br>DVB-S/S2 RF input<br>(with CAM)                                   | Transmitter with<br>DVB-S/S2 RF input<br>(with CAM)                                     | Transmitter with<br>DVB-S/S2 RF input<br>(with CAM) | Transmitter with<br>DVB-S/S2 RF input<br>(with CAM)                                   |  |  |  |  |
| DVB-T/T2                        | Х                                  | Regenerative Tran-<br>sposer / Heterodyne<br>Transposer / GapFiller<br>Echo Canceller | Regenerative Tran-<br>sposer / Heterodyne<br>Transposer / GapFiller<br>Echo Canceller | Х   | Х   | Х   |  |  |  |  |
| ISDBT                           | X X X F                            |   | Regenerative Tran-<br>sposer / Heterodyne<br>Transposer / GapFiller<br>Echo Canceller | Х   | Х   |   |  |  |  |  |
| ATSC X                          |                                    | Х   | Х   | X Regenerative Tran-<br>sposer / Heterodyne<br>Transposer / GapFiller<br>Echo Canceller |   | Х   |  |  |  |  |
| DTMB X                          |                                    | Х   | Х   | Х   | Х   | Regenerative Tran-<br>sposer / Heterodyne<br>Transposer / GapFiller<br>Echo Canceller |  |  |  |  |



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# Specifications



#### Front View. Transmitter with Satellite Receiver

SDT SERIES ARK-6

DTV + ATV

#### 1. DVB-S2 Input Configuration - Satellite Input Specifications

- N. SAT Inputs: 1
- Connector type: F Female
- Input impedance: 75 ohm
- Input level: -81 dB up to -17 dB
- Supported symbol rates: 1 to 45 Msymb/s (DVB-S) / 1 to 67.5 (DVB-S2 depending on modulation scheme).
- DiSEqC: 2.0
- TS interface: broadcast reception and ISI filtering supported.
- Supported standards: ETSI EN 302 307 (DVB-S2)
- DVB-T/T2 available



Front View. Transmitter with Satellite Receiver with Decoder and CAM

#### 2. DVB-S2 Input with DEC and CAM Configuration - Satellite and CAM Specifications

- N. GPS Inputs: 1
- Connector type: F Female
- Input impedance: 75 ohm
- Input level: -81 dB up to -17 dB
- Supported symbol rates: 1 to 45 Msymb/s (DVB-S) / 1 to 67.5 (DVB-S2 depending on modulation scheme).
- DiSEqC: 2.0
- TS interface: broadcast reception and ISI filtering supported.
- Supported standards: ETSI EN 302 307 (DVB-S2)
- DVB-T/T2, ITU available
- Common Interface:
- N° card slots: 1
- Type: PCMCIA
- Supported CAM:



Front View. Transposer and Regenerative Transmitter

#### 3. DVB-T/T2 Transposer and Regenerative Transmitter Configuration - Terrestrial RF IN Specifications

- N. RF Inputs: 1
- Connector type: N Female
- Input impedance: 50 ohm
- Input level: -81 dB up to -17 dB
- Supported standards: DVB-T/H, DVB-T2
- DVB-T/T2 available



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# Specifications



Front View. Transmitter Only Version

#### 4 Multistandard Transmitter Configuration

Inputs: 4 ASI and 2 TSoIP channels

SDT SERIES ARK-6

DTV + ATV

- Outpus: 1 RF, 1 RF Monitor
  - 2 ASI and 2 TSoIP channels for inputs bypass
- Synchronization: External or GPS
- Internal clock: Oven Controlled OCXO oscillator (10 MHz and 1 PPS)
- Output clock: 1 PPS and 10 MHz
- Test modes: CW, Force Null Packets and PRBS
- Management: Embedded SNMP v1 server
- Embedded Web server
- GbE Ports: GbE 1: 10/100/1000 Base T Management port
- GbE 2: 10/100/1000 Base T Data port
- Redundancy: Input autoswitch algorithm supported
- Security: Authentication for GUI access supported
- Configuration: Automatic loading of preset configurations supported.
- Automatic retriving of configuration data from the RF input supported.
- DVB-T/T2 available



#### Front View. Transmitter with Analog A/V Inputs

#### 5. Digitizer with Analog A/V Inputs Configuration - A/V Specifications

- N. CVBS inputs: 2
- Connector type: BNC
- Input impedance: 75 ohm
- Supported video standards: PAL B,D,G,H,I,M,N, NTSC
- Analog audio input
- N°Inputs: 2 L/R couples
- Connector type: XLR3 (Cannon f)
- Input impedance: 600 Ohm balanced
- Input Level: +6dBm +/- 6 dB
- Supported standards: EIA RF-297-A
- ITU available
- Inputs: 4 SDI, 2 CVBS and 2 L/R
- Supported Composite Standards: NTSC CVBS, PAL (B, D, G, H, I, M, N) CVBS
- Supported SDI Standard: SMPTE 259M-C Component 4:2:2, 270Mb/s for 525 and 625 lines, 13.5 MHz sampling, 4x3 and 16x9 aspect ratios.
- Outputs: 1 RF, 1 RF Monitor

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- 2 SDI for inputs bypass
- Synchronization: External or GPS
- Internal clock: Oven Controlled OCXO oscillator (10 MHz and 1 PPS)
- Output clock: 1 PPS and 10 MHz
- Test modes: CW, CW AV, Mute Audio Carrier, Mute Audio, Audio Test Tone, Video In, SMPTE Bars, Horizontal Bars, Red Field, ITS0, ITS1, ITS2, ITS3 and ITS4.
- Management: Embedded SNMP v1 server
- Embedded Web server
   GhE Ports: GhE 1: 10/100/1000 Base T M
- GbE Ports: GbE 1: 10/100/1000 Base T Management port
- Redundancy: Input autoswitch algorithm supported
   Security: Authentication for GUI access supported.

# Specifications

# Hardware Specifications

| TYPE:              | DESCRIPTION AND NUMBER:                   | TYPE:                   | DESCRIPTION AND NUMBER:                               |
|--------------------|---|-------------------------|---|
|                    | Connectors used as ASI, SMPTE-310 or SDI: |                         | N° outputs: 4   |
|                    | N° Inputs: 4                              | Relays                  | Connectors: SUB-D 25p Female                          |
|                    | Connector type: BNC                       |                         | Max voltage: 125VAC / 60VDC @ 0,3A - 30VDC @ 1A       |
|                    | Input impedance: 75 ohm                   |                         | N° inputs: 4  |
| ASI/SSI/SDI Input  | Input voltage: 800 mVpp (500 to 1200mVpp) | Opto                    | Connectors: SUB-D 25p Female                          |
|                    | Supported standards:                      |                         | Max current: -5 mA                                    |
|                    | CEI EN 50083-9                            |                         |   |
|                    | SMPTE 310                                 | RF Front-End input      | Please refer to various configurations for a complete |
|                    | SMPTE 259M                                |                         | description of all the available Front-end modules    |
|                    | N° Inputs: 1                              |                         |   |
| PS RF Input        | Sensitivity: -185dBW                      |                         |   |
|                    | Connectors: TNC                           |                         |   |
|                    | N° Inputs: 1                              |                         | N° Inputs: 1  |
| 10 MHz Input       | Connector: BNC                            |                         | Connector type:                                       |
|                    | Input impedance: 50 ohm                   |                         | Input impedance: 50 ohm                               |
|                    | Input voltage: 2 Vpp                      | RF Measure board inputs | Input level: -40 dB up to -8.5 dB                     |
|                    | N° Inputs: 1                              |                         | Supported standards:                                  |
|                    | Connector: BNC                            |                         | DVB-T/H ISDB-T ATSC DVB-T2 DTMB                       |
| 1PPS Input         | Input impedance: 50 ohm                   |                         |   |
|                    | Input voltage: TTL (min 1,7V)             |                         |   |
|                    | Pulse width: 100us                        |                         | N° inputs: 1  |
|                    | Connectors used for monitoring purposes:  |                         | Speed: up to 230400 bps                               |
|                    | N° outputs: 2                             | DB9 - RS232             | 8-bit data  |
|                    | Connector type: BNC                       |                         | No parity hits  |
| ASI Output Monitor | Input impedance: 75 ohm                   |                         | 1 ston hit  |
|                    | Input voltage: 800 mVpp (500 to 1200mVpp) | DB9 - RS485             |   |
|                    | Supported standards:                      | CAM BUS                 | N° inputs: 1  |
|                    | CEI EN 50083-9                            |                         |   |
|                    |   |                         | Nº inpute: 1  |
| 10 MHz Output      | Connector: SMB                            | DD15 - 12C              | n inputs. I   |
|                    | Output impedance: 50 ohm                  |                         |   |
|                    | Output voltage: 2 Vpp                     | DB25 - TLS              | N° inputs: 1  |
|                    | Connector: SMP                            |                         |   |
| 1 DDC Quetwort     | Z load 50 ahm                             |                         |   |
|                    | 2 load. 50 0mm                            |                         |   |
|                    | Output voitage: TTE (min 2,4v)            |                         |   |
|                    | Puise width: 100us<br>N° connectors: 2    |                         |   |
| Gigabit Ethernet   | Connector: RJ45                           |                         |   |
|                    | Supported standards: IEEE 802.3           |                         |   |
|                    | Supported Standards, TEEE 002.0           |                         |   |
|                    |   |                         |   |



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| Specifications                | 1                            |   |
|-------------------------------|------------------------------|---|
| <b>F</b>                      |                              |   |
| Frequency range               | UHF (Band IV/V)              | 470 to 862 MHz, in 1 Hz Step                            |
|                               | VHF (Band III)               | 170 to 255 MHz, In T Hz Step                            |
| Available standards           |                              |   |
| (all standars are full        | District TV                  | DVB-T, DVB-T2, DVB-H, ISDB-Tb, ATSC, ATSC Mobile        |
| (all standars are full        | Digital IV                   | DTV,DTMB  |
| compliant)                    |                              | ,   |
|                               | Digital Audio Broadcasting   | DAB,DAB+,T-DMB  |
|                               | Analog TV                    | B/G, D/K, M, M1, N, I, I1                               |
|                               |                              |   |
| Power Supply                  | AC Line Voltage              | 380 to 415 (3 phases), 208 to 240 Delta or Star ; 47    |
|                               | Ac Elle voltage              | Hz to 63 Hz To be specify at order                      |
|                               | AC Line variations           | +/- 15%   |
|                               | Power factor                 | ≥ 0,98  |
|                               |                              |   |
| Environmental                 | Altitude                     | 2500 m above sea level (> 2500 m on request)            |
| Conditions                    |                              |   |
|                               | Operating temperature range  | -10 °C to +45 °C at sea level, upper limit derated of 2 |
|                               | operating temperature range  | °C per 300 m Above Mean Sea Level                       |
|                               | Relative humidity            | 95 %, not-condensing                                    |
|                               | Cooling method               | Forced Air / liquid with external heat exchanger with   |
|                               |                              | redounded fan   |
|                               |                              |   |
| RF output                     | Output power variation range | +0,5 to -10 dB  |
|                               | RF load impedance            | 50 Ohm  |
|                               | VSWR                         | Power reduction after exceeding the set value or        |
|                               |                              | switch off after three attempts                         |
|                               | RF Output connector          | See Specific Data Sheet                                 |
| Tuo nonsitton sino            | De els Huit                  | Can Madal Spacific Data Shaat                           |
| Transmitter size              | Kack Unit                    | See Model Specific Data Sheet                           |
|                               | Dimonsion                    |   |
|                               | Dimension                    |   |
| Synchronization               | Reference frequency          | 10 MHz 0.1 V to 5 V (Vpp) or TTL_BNC                    |
| Synchronizacion               | Reference nulse              |   |
|                               |                              |   |
| <b>Operations Control and</b> | <b>D</b>                     |   |
| Monitoring                    | Remote                       | Web based Java Interface                                |
|                               |                              | SNMP  |
|                               |                              | Telnet access via ethernet                              |
|                               |                              |   |
|                               | Local                        | Extensive front panel control                           |
|                               |                              | Local terminal on RS232                                 |
|                               |                              |   |
| Compliance and                | RoHS                         | 2002/95/FC  |
| Conformity                    |                              |   |
|                               | Kalle                        | 1999/5/EC   |
|                               | Safety                       | EN 60215  |
|                               |                              | EN 301-4891-1   |
|                               |                              |   |
|                               | VVEEE<br>Manufacturing       | 2002/30/EC  |
|                               | wanuracturing                |   |
| Specifications are subje      | ect to change without notice |   |
| Specifications are subje      | ce to change without houce   |   |

-----ScreenService

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# Models Selection Guide

| mouch beleen         |                |                  |                         |            |                 |                     |         |                      |                             |  |   |
|----------------------|----------------|------------------|-------------------------|------------|-----------------|---------------------|---------|----------------------|-----------------------------|--|---|
| Models               | Output<br>Band | Working<br>Class | Dimensions              | N.<br>Ampl | kind of<br>Ampl | Output<br>Connector | Cooling | Meter<br>board<br>N. | Shoulders @ Fo<br>± 4.3 MHz | Digital output<br>power (rms) without<br>Filter DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 000UA ARK-6-HE   | UHF            | A                | 1 RU (19" rack), 400 mm |            |                 | N                   | Air     | -                    | -37                         | 1mW  | 1mW                                       |
| SDT 200UA ARK-6      | UHF            | A                | 1 RU (19" rack), 400 mm | 1          |                 | N                   | Air     | -                    | -36                         | 2,5 W  | 80 W                                      |
| SDT 200TB ARK-6      | VHF (III)      | A                | 1 RU (19" rack), 400 mm | 1          |                 | N                   | Air     | -                    | -36                         | 2,5 W  | 80 W                                      |
| SDT 500UB ARK-6      | UHF            | AB               | 1 RU (19" rack), 400 mm | 1          | SCA500UB        | N                   | Air     | -                    | -36                         | 12 W   | 50 W                                      |
| SDT 500TB ARK-6      | VHF (III)      | AB               | 1 RU (19" rack), 400 mm | 1          | SCA500TB        | N                   | Air     | -                    | -36                         | 12 W   | 50 W                                      |
| SDT 201UB ARK-6 HE C | UHF            | AB               | 2 RU (19" rack), 400 mm | 1          |                 | 7/16"               | Air     | -                    | -39                         | 150 W  | 400 W                                     |
| SDT 201UB ARK-6 C    | VHF (III)      | AB               | 2 RU (19" rack), 400 mm | 1          |                 | 7/16"               | Air     | -                    | -36                         | 80 W   | 250 W                                     |
| SDT 201UB ARK-6 HE   | UHF            | AB               | 1 +3 RU                 | 1          |                 | 7/16"               | Air     | -                    | -39                         | 150 W  | 450 W                                     |
| SDI 201UB ARK-6      | UHF            | AB               | 1 +3 RU                 | 1          |                 | 7/16"               | Air     | -                    | -36                         | 80 W   | 250 W                                     |
| SDI 2011B ARK-6      | VHF (III)      | AB               | 1 +3 KU                 | 1          |                 | 7/16"               | Air     |                      | -36                         | 80 W   | 250 W                                     |
| SDT SUTUB ARK-6 HE C | UHF            | AB               | 3 RU                    | 1          |                 | 7/16                | Air     | -                    | -39                         | 300 W  | 800 W                                     |
|                      |                | AD               | 2 PU                    | 1          |                 | 7/16                | Air     | -                    | -30                         | 150 W  | 700 W                                     |
| SDT 5011/B ARK-6 HE  |                | AB               | 15 RU (4+1)             | 1          | SCA501          | 7/16"               | Air     | -                    | -30                         | 350 W  | 1000 W                                    |
| SDT 501UB ARK-6      | LIHE           | AB               | 15 RU (4+1)             | 1          | SCA501          | 7/16"               | Air     |                      | -35                         | 150 W  | 700 W/                                    |
| SDT 501TB ARK-6      | VHF (III)      | AB               | 15 RU (4+1)             | 1          | SCA501          | 7/16"               | Air     | -                    | -36                         | 150 W  | 700 W                                     |
| SDT 102UB ARK-6 HE   | UHF            | AB               | 1+5 RU                  | 1          | SCA102HE        | 7/16"               | Air     |                      | -39                         | 700 W  | 2000 W                                    |
| SDT 102UM ARK-6 HE   | UHF            | AB               | 30 RU                   | 2          | SDT501HE        | 7/16"               | Air     |                      | -39                         | 700 W  | 2000 W                                    |
| SDT 102UB ARK-6      | UHF            | AB               | 1+5 RU                  | 1          | SCA102UB        | 7/16"               | Air     |                      | -36                         | 300 W  | 1400 W                                    |
| SDT 102UM ARK-6      | UHF            | AB               | 30RU                    | 2          | SCA501UB        | 7/16"               | Air     |                      | -36                         | 300 W  | 1400 W                                    |
| SDT 102TB ARK-6      | VHF (III)      | AB               | 1+5 RU                  | 1          | SCA102TB        | 7/16"               | Air     |                      | -36                         | 300 W  | 1400 W                                    |
| SDT 102TM ARK-6      | VHF (III)      | AB               | 30 RU                   | 2          | SCA501TB        | 7/16"               | Air     |                      | -36                         | 300 W  | 1400 W                                    |
| SDT 202UB ARK-6 HE   | UHF            | AB               | 1+5 RU                  | 1          | SCA202HE        | 7/8"                | Air     |                      | -39                         | 1300 W   | 3000 W                                    |
| SDT 202UM ARK-6 HE   | UHF            | AB               | 30 RU                   | 2          | SCA202HE        | 7/8"                | Air     |                      | -39                         | 1300 W   | 3000 W                                    |
| SDT 202UB ARK-6      | UHF            | AB               | 1+5 RU                  | 1          | SCA202UB        | 7/8"                | Air     |                      | -36                         | 700 W  | 2800 W                                    |
| SDT 202UM ARK-6      | UHF            | AB               | 30RU                    | 2          | SCA202UB        | 7/8"                | Air     |                      | -36                         | 700 W  | 2800 W                                    |
| SDT 202TB ARK-6      | VHF (III)      | AB               | 1+5 RU                  | 1          | SCA202TB        | 7/8"                | Air     |                      | -36                         | 700 W  | 2800 W                                    |
| SDT 202TM ARK-6      | VHF (III)      | AB               | 30 RU                   | 2          | SCA202TB        | 7/8"                | Air     |                      | -36                         | 700 W  | 2800 W                                    |
| SDT 502UB ARK-6 HE   | UHF            | AB               | 30 RU                   | 2          | SCA202HE        | 1+5/8"              | Air     | 1                    | -39                         | 2600 W   | 6000 W                                    |
| SDI 502UM ARK-6 HE   | UHF            | AB               | 40 RU                   | 4          | SCA102HE        | 1+5/8"              | Air     | 1                    | -39                         | 2600 W   | 6000 W                                    |
| SDI 5020B-W AKK-6 HE | UHF            | AB               | 40 RU                   | 2          | SCA202HE-W      | 1+5/8               | Liquid  | 1                    | -39                         | 2600 W   | 6000 W                                    |
| SDI502UB ARK-6       | UHF            | AB               | 30 RU                   | 2          | SCA202UB        | 1+5/8               | Air     | 1                    | -36                         | 1300 W   | 5000 W                                    |
| SDT 502UM ARK_6      | LIHE           | AB               | 40 RU                   | 2          | SCA102UB        | 1+5/8"              | Δir     | 1                    | -36                         | 1300 W   | 5000 W                                    |
| SDT 5020W ARK-6      | VHE (III)      | AB               | 30 RU                   | 2          | SCA202TB        | 1+5/8"              | Air     | 1                    | -36                         | 1300 W   | 5000 W                                    |
| SDT 502TB-W ARK-6    | VHF (III)      | AB               | 40 RU                   | 2          | SCA202TB-W      | 1+5/8"              | Liquid  | 1                    | -36                         | 1300 W   | 5000 W                                    |
| SDT 502TM ARK-6      | VHF (III)      | AB               | 40 RU                   | 4          | SCA102TB        | 1+5/8"              | Air     | 1                    | -36                         | 1300 W   | 5000 W                                    |
| SDT 532UB-W ARK-6 HE | UHF            | AB               | 40 RU                   | 3          | SCA202HE-W      | 1+5/8"              | Liquid  | 1                    | -39                         | 3900 W   | 9000 W                                    |
| SDT 532UB-W ARK-6    | UHF            | AB               | 40 RU                   | 3          | SCA202UB-W      | 1+5/8"              | Liquid  | 1                    | -36                         | 2000 W   | 7500 W                                    |
| SDT 532TB-W ARK-6    | VHF (III)      | AB               | 40 RU                   | 3          | SCA202TB-W      | 1+5/8"              | Liquid  | 1                    | -36                         | 2000 W   | 7500 W                                    |
| SDT 103UM ARK-6 HE   | UHF            | AB               | 40 RU                   | 4          | SCA202HE        | 3+1/8"              | Air     | 1                    | -39                         | 5200 W   | 12000 W                                   |
| SDT 103UM-W ARK-6 HE | UHF            | AB               | 40 RU                   | 4          | SCA202HE        | 3+1/8"              | Liquid  | 1                    | -39                         | 5200 W   | 12000 W                                   |
| SDT 103UM ARK-6      | UHF            | AB               | 40 RU                   | 4          | SCA202UB        | 3+1/8"              | Air     | 1                    | -36                         | 2600 W   | 10000 W                                   |
| SDT 103UM-W ARK-6    | UHF            | AB               | 40 RU                   | 4          | SCA202UB-W      | 3+1/8"              | Liquid  | 1                    | -36                         | 2600 W   | 10000 W                                   |
| SDT 103TM ARK-6      | VHF (III)      | AB               | 40 RU                   | 4          | SCA202TB        | 3+1/8"              | Air     | 1                    | -36                         | 2600 W   | 10000 W                                   |
| SDT 103TM-W ARK-6    | VHF (III)      | AB               | 40 RU                   | 4          | SCA202TB-W      | 3+1/8"              | Liquid  | 1                    | -36                         | 2600 W   | 10000 W                                   |
| SDI 123UM-W ARK-6    | UHF            | AB               | 40 RU                   | 5          | SCA202UB-W      | 3+1/8"              | Liquid  | 1                    | -36                         | 3200 W   | 12500 W                                   |
| SDI 1231M-W ARK-6    | VHF (III)      | AB               | 40 RU                   | 5          | SCA2021B-W      | 3+1/8"              | Liquid  | 1                    | -36                         | 3200 W   | 12500 W                                   |
| SDT 133UM-W ARK-6 HE | UHF            | AB               | 2 x 40 RU               | 6          | SCA202HE-W      | 3+1/8               | Liquid  | 1                    | -39                         | 7800 W   | 18000 W                                   |
| SDT 133UW-W ARK-6    |                | AB               | 2 x 40 RU               | 6          | SCA2020B-W      | 3+1/8               | Liquid  | 1                    | -36                         | 6000 W   | 16000 W                                   |
| SDT 203UM ARK-6 HE   |                | AB               | 2 x 40 RU               | 8          | SCA2021D-VV     | 3+1/8"              | Air     | 2                    | -30                         | 10000 W  | 24000 W                                   |
| SDT 203UM-W ARK-6 HE | LIHE           | AB               | 2 x 40 RU               | 8          | SCA202HE        | 3+1/8"              | Liquid  | 2                    | -39                         | 10000 W  | 24000 W                                   |
| SDT 203UM ARK-6      | UHE            | AB               | 2 x 40 RU               | 8          | SCA202UB        | 3+1/8"              | Air     | 2                    | -36                         | 5000 W   | 20000 W                                   |
| SDT 203UM-W ARK-6    | UHF            | AB               | 2 x 40 RU               | 8          | SCA202UB-W      | 3+1/8"              | Liquid  | 2                    | -36                         | 5000 W   | 20000 W                                   |
| SDT 203TM ARK-6      | VHF (III)      | AB               | 2 x 40 RU               | 8          | SCA202TB        | 3+1/8"              | Air     | 2                    | -36                         | 5000 W   | 20000 W                                   |
| SDT 203TM-W ARK-6    | VHF (III)      | AB               | 2 x 40 RU               | 8          | SCA202TB-W      | 3+1/8"              | Liquid  | 2                    | -36                         | 5000 W   | 20000 W                                   |
| SDT 303UM-W ARK-6 HE | UHF            | AB               | 3 X 40 RU               | 12         | SCA202HE-W      | 4+1/2"              | Liquid  | 4                    | -39                         | 15000 W  | 36000 W                                   |
| SDT 303UM-W ARK-6    | UHF            | AB               | 3 X 40 RU               | 12         | SCA202UB-W      | 4+1/2"              | Liquid  | 4                    | -36                         | 7800 W   | 32000 W                                   |
| SDT 303TM-W ARK-6    | VHF (III)      | AB               | 3 X 40 RU               | 12         | SCA202TB-W      | 4+1/2"              | Liquid  | 4                    | -36                         | 7800 W   | 32000 W                                   |
| SDT 403UM-W ARK-6 HE | UHF            | AB               | 4 X 40 RU               | 16         | SCA202HE-W      | 4+1/2"              | Liquid  | 4                    | -39                         | 20000 W  | 48000 W                                   |
| SDT 403UM-W ARK-6    | UHF            | AB               | 4 X 40 RU               | 16         | SCA202UB-W      | 4+1/2"              | Liquid  | 4                    | -36                         | 10000 W  | 40000 W                                   |
| SDT 403TM-W ARK-6    | VHF (III)      | AB               | 4 X 40 RU               | 16         | SCA202TB-W      | 4+1/2"              | Liquid  | 4                    | -36                         | 10000 W  | 40000 W                                   |
| SDT 603UM-W ARK-6 HE | UHF            | AB               | 6 X 40 RU               | 24         | SCA202HE-W      | 6+1/8"              | Liquid  | 6                    | -39                         | 30000 W  | 72000 W                                   |
| SDI 603UM-W ARK-6    | UHF            | AB               | 6 X 40 RU               | 24         | SCA202UB-W      | 6+1/8"              | Liquid  | 6                    | -36                         | 15000 W  | 64000 W                                   |
| SDI 6031M-W ARK-6    | VHF (III)      | AB               | 6 X 40 RU               | 24         | SCA2021B-W      | 6+1/8"              | Liquid  | 6                    | -36                         | 15000 W  | 64000 W                                   |
|                      |                |                  |                         |            |                 |                     |         |                      |                             |  |   |
| c :::                |                |                  |                         |            |                 |                     |         | -                    |                             |  |   |

Specifications and characteristics are subject to change without notice



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# SDT 000 ARK-6

# DTMB Transmitter/modulator up to 1mW rms



HETERODYNE

TRANSPOSER

RF > IF > RF

TRANSMITTER

ASI > MOD > RF

SAT RX

SAT > TS > RF

> SDT 000 ARK-DTMB

AUTOMATIC

DIGITAL/ANALOG

REGENERATIVE

TRANSMITTER

RF > ASI > MOD > RF

SAT RX w DFC

with CAM

SAT > DEC > TS > RF



The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries - to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface: or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# D/3 T ISDB-T DIMB

# Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
- Bandwidth:
- Video Source Coding:

#### VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

#### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



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|                       |                         | Terr Res a |
|-----------------------|-------------------------|------------|
| Front View. Transpose | r and Transmitter Versi | on         |



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version

| - | 2 | 분류 | 主主  |   | 놓는 |       | 0-10-10-10-10-10-10-10-10-10-10-10-10-10 | 0.0.00 | 1 |
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|   |   |    | 192 | - |    | 10.10 | A Strail                                 | 1000   |   |
| - |   |    |     |   |    |       |  |        | - |

Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA       |   |                  |                         |            |              |                     |         |                   |                             |  |   |
|---------------------------|---|------------------|-------------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models                    | Output<br>Band  | Working<br>Class | Dimensions              | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT000UA ARK-6            | UHF   | A                | 1 RU (19" rack), 400 mm |            |              | N                   | Air     | -                 | -37                         | 1mW  | 1mW                                       |
| Specifications and charac | pecifications and characteristics are subject to chanae without notice. |                  |                         |            |              |                     |         |                   |                             |  |   |



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 200 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter 20W ps/2,5W rms



 

 AUTOMATIC DIGITAL/ANALOG
 HETERODYNE TRANSPOSER

 RF > IF > RF

 REGENERATIVE TRANSMITTER
 RF > ASI > MOD > RF

 RF > ASI > MOD > RF
 ASI > MOD > RF

 SAT RX w DEC with CAM
 SAT RX

 SAT > DEC > TS > RF
 SAT > TS > RF

# ATV DV3 T ATSC a-t-s c ISDB-T JTMB

# Description

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we call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264
- Video Source Coding:

## **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.

VHF, UHF



| Front View. Transpo | ser and Transmitter Vers | ion |
|---------------------|--------------------------|-----|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version

| - | 2 | 분류 | 主主  |   | 놓는 |       | 0-10-10-10-10-10-10-10-10-10-10-10-10-10 | 0.0.00 | 1 |
|---|---|----|-----|---|----|-------|--|--------|---|
|   |   |    | 192 | - |    | 10.10 | A Strail                                 | 1000   |   |
| - |   |    |     |   |    |       |  |        | - |

Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|  | MODEL SPECIFIC DATA |                  |                         |            |              |                     |         |                   |                             |  |   |
|--|---------------------|------------------|-------------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models   | Output<br>Band      | Working<br>Class | Dimensions              | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 200UA ARK-6  | UHF                 | A                | 1 RU (19" rack), 400 mm | 1          |              | N                   | Air     | -                 | -36                         | 2,5 W  | 80 W                                      |
| SDT 200TB ARK-6  | VHF (III)           | A                | 1 RU (19" rack), 400 mm | 1          |              | N                   | Air     | -                 | -36                         | 2,5 W  | 80 W                                      |
| Specifications and characteristics are subject to change without notice. |                     |                  |                         |            |              |                     |         |                   |                             |  |   |



GUI, modulation page.



Screen Service



#### GUI, main page.

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|      | -    | 444  | - 111 | -     | -141 | -140 | -14 |     |        |         | -        |   | in. | -44      | 140         |     |     |      |    |     |
|      |      |      |       |       |      |      |     |     |        | - AL    |          |   |     |          |             |     |     |      |    |     |

GUI, linear pre correction page.

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# SDT 500 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter 50W ps/12W rms



> SDT 500 ARK-6



# Image: Arrow Color Image: Arrow Color Arrow Color Image: Arrow Color ISDB-T Image: Arrow Color

-vA

# Description

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# Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

### Video Source Coding:

#### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



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| Front View. Transpose | r and Transmitter Versi | on         |



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version

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Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA  |                |                  |                         |            |              |                     |         |                   |                             |  |   |
|--|----------------|------------------|-------------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models   | Output<br>Band | Working<br>Class | Dimensions              | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 500UB ARK-6  | UHF            | AB               | 1 RU (19" rack), 400 mm | 1          | SCA500UB     | N                   | Air     | -                 | -36                         | 12 W   | 50 W                                      |
| SDT 500TB ARK-6  | VHF (III)      | AB               | 1 RU (19" rack), 400 mm | 1          | SCA500TB     | N                   | Air     | -                 | -36                         | 12 W   | 50 W                                      |
| Specifications and characteristics are subject to change without notice. |                |                  |                         |            |              |                     |         |                   |                             |  |   |



GUI, modulation page.



Screen Service



#### GUI, main page.

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|      |      |      |     |      |         |      |        |     |      |     |        |    | 1.1.1 |       |       |     |   |        |        |

GUI, linear pre correction page.

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# SDT 201 ARK-6 Compact

# Heterodyne Transposer, Regenerative Transmitter, Transmitter, up to 400W ps/150W rms



> SDT 201 ARK-6



# Image: Arrow Color Image: Arrow Color Arrow Color Image: Arrow Color ISDB-T Image: Arrow Color

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology. We call it UNIVERSAL DRIVER because of its incredible capability to be all configu-

rations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

## Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# Video Source Coding:

### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.

VHF, UHF



| Front View. Transpos | er and Transmitter Vers | ion |
|----------------------|-------------------------|-----|



Front View. Transmitter with DVB-S2 Receiver Version

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Front View. Transmitter Version

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Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| Serieral Speemeatons          |  |
|-------------------------------|--|
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|                           |                |                  |                         |            | MO           | DEL SPECIFIC I      | DATA    |                   |                             |  |   |
|---------------------------|----------------|------------------|-------------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models                    | Output<br>Band | Working<br>Class | Dimensions              | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 201UB ARK-6 HE C      | UHF            | AB               | 2 RU (19" rack), 400 mm | 1          |              | 7/16"               | Air     | -                 | -39                         | 150 W  | 400 W                                     |
| SDT 201UB ARK-6 C         | VHF (III)      | AB               | 2 RU (19* rack), 400 mm | 1          |              | 7/16"               | Air     | -                 | -36                         | 80 W   | 250 W                                     |
| Specifications and charac | teristics are  | subject to char  | nge without notice.     |            |              |                     |         |                   |                             |  |   |



#### GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

n Ar-

# SDT 201 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 450W ps/150W rms



> SDT 201 ARK-6 NC





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# Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# **Main Features**

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

## **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



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| Front View. Transpose | r and Transmitter Versi | on         |



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|                           |                |                  |                            |            | MO           | DEL SPECIFIC        | DATA    |                   |                             |  |   |
|---------------------------|----------------|------------------|----------------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models                    | Output<br>Band | Working<br>Class | Dimensions                 | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 201UB ARK-6 HE        | UHF            | AB               | 1 +3 RU (19" rack), 400 mm | 1          |              | 7/16"               | Air     | -                 | -39                         | 150 W  | 450 W                                     |
| SDT 201UB ARK-6           | UHF            | AB               | 1 +3 RU (19" rack), 400 mm | 1          |              | 7/16"               | Air     | -                 | -36                         | 80 W   | 250 W                                     |
| SDT 201TB ARK-6           | VHF (III)      | AB               | 1 +3 RU (19" rack), 400 mm | 1          |              | 7/16"               | Air     |                   | -36                         | 80 W   | 250 W                                     |
| Specifications and charac | teristics are  | subject to char  | nge without notice.        |            |              |                     |         |                   |                             |  |   |



#### GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

n Ar-

# SDT 501 ARK-6 Compact

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 800W ps/300W rms





# Image: Arrow Color Image: Arrow C

-v/W

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

## Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

## **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



| Front View. Transpos | er and Transmitter Vers | ion |
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Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version

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Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|                           |                |                  |                         |            | MO           | DEL SPECIFIC        | DATA    |                   |                             |  |   |
|---------------------------|----------------|------------------|-------------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models                    | Output<br>Band | Working<br>Class | Dimensions              | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 501UB ARK-6 HE C      | UHF            | AB               | 3 RU (19" rack), 400 mm | 1          |              | 7/16                | Air     | -                 | -39                         | 300 W  | 800 W                                     |
| SDT 501UB ARK-6 C         | UHF            | AB               | 3 RU (19" rack), 400 mm | 1          |              | 7/16                | Air     | -                 | -36                         | 150 W  | 700 W                                     |
| SDT 501TB ARK-6 C         | VHF (III)      | AB               | 3 RU (19" rack), 400 mm | 1          |              | 7/16                | Air     | -                 | -36                         | 150 W  | 700 W                                     |
| Specifications and charac | teristics are  | subject to char  | nge without notice.     |            |              |                     |         |                   |                             |  |   |



GUI, modulation page.



<u>"S</u>creen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 501 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 1000W ps/350W rms



> SDT 501 ARK-6





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## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# **Main Features**

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 40AM, 40AM-NR, 160AM, 320AM, 640AM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# Video Source Coding:

**Option Features** 

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



|                       |                         | Terr Res a |
|-----------------------|-------------------------|------------|
| Front View. Transpose | r and Transmitter Versi | on         |



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|                           | MODEL SPECIFIC DATA   |                  |             |            |              |                     |         |                   |                             |  |   |  |
|---------------------------|---|------------------|-------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|--|
| Models                    | Output<br>Band  | Working<br>Class | Dimensions  | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |  |
| SDT 501UB ARK-6 HE        | UHF   | AB               | 15 RU (4+1) | 1          | SCA501       | 7/16"               | Air     | -                 | -39                         | 350 W  | 1000 W                                    |  |
| SDT 501UB ARK-6           | UHF   | AB               | 15 RU (4+1) | 1          | SCA501       | 7/16"               | Air     | -                 | -36                         | 150 W  | 700 W                                     |  |
| SDT 501TB ARK-6           | VHF (III)   | AB               | 15 RU (4+1) | 1          | SCA501       | 7/16"               | Air     | -                 | -36                         | 150 W  | 700 W                                     |  |
| Specifications and charac | pecifications and characteristics are subject to change without notice. |                  |             |            |              |                     |         |                   |                             |  |   |  |



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 102 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 2000W ps/700W rms







-v/W

# Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# **Main Features**

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

## **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



| Front View. Transpos | er and Transmitter Vers | ion |
|----------------------|-------------------------|-----|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA |                |                  |            |            |              |                     |         |                   |                             |  |   |
|---------------------|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models              | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 102UB ARK-6 HE  | UHF            | AB               | 1+5 RU     | 1          | SCA102HE     | 7/16"               | Air     |                   | -39                         | 700 W  | 2000 W                                    |
| SDT 102UM ARK-6 HE  | UHF            | AB               | 30 RU      | 2          | SDT501HE     | 7/16*               | Air     |                   | -39                         | 700 W  | 2000 W                                    |
| SDT 102UB ARK-6     | UHF            | AB               | 1+5 RU     | 1          | SCA102UB     | 7/16*               | Air     |                   | -36                         | 300 W  | 1400 W                                    |
| SDT 102UM ARK-6     | UHF            | AB               | 30RU       | 2          | SCA501UB     | 7/16*               | Air     |                   | -36                         | 300 W  | 1400 W                                    |
| SDT 102TB ARK-6     | VHF (III)      | AB               | 1+5 RU     | 1          | SCA102TB     | 7/16*               | Air     |                   | -36                         | 300 W  | 1400 W                                    |
| SDT 102TM ARK-6     | VHF (III)      | AB               | 30 RU      | 2          | SCA501TB     | 7/16"               | Air     |                   | -36                         | 300 W  | 1400 W                                    |

Specifications and characteristics are subject to change without notice.



GUI, modulation page.



Screen Service



#### GUI, main page.

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GUI, linear pre correction page.

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# SDT 202 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 3000W ps/1300W rms



> SDT 202 ARK-6





-v/W

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

## Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

#### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



| Front View. Transpos | er and Transmitter Vers | ion |
|----------------------|-------------------------|-----|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA |                |                  |            |            |              |                     |         |                   |                             |  |   |
|---------------------|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models              | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 202UB ARK-6 HE  | UHF            | AB               | 1+5 RU     | 1          | SCA202HE     | 7/8"                | Air     |                   | -39                         | 1300 W   | 3000 W                                    |
| SDT 202UM ARK-6 HE  | UHF            | AB               | 30 RU      | 2          | SCA202HE     | 7/8"                | Air     |                   | -39                         | 1300 W   | 3000 W                                    |
| SDT 202UB ARK-6     | UHF            | AB               | 1+5 RU     | 1          | SCA202UB     | 7/8"                | Air     |                   | -36                         | 700 W  | 2800 W                                    |
| SDT 202UM ARK-6     | UHF            | AB               | 30RU       | 2          | SCA202UB     | 7/8"                | Air     |                   | -36                         | 700 W  | 2800 W                                    |
| SDT 202TB ARK-6     | VHF (III)      | AB               | 1+5 RU     | 1          | SCA202TB     | 7/8"                | Air     |                   | -36                         | 700 W  | 2800 W                                    |
| SDT 202TM ARK-6     | VHF (III)      | AB               | 30 RU      | 2          | SCA202TB     | 7/8"                | Air     |                   | -36                         | 700 W  | 2800 W                                    |

Specifications and characteristics are subject to change without notice.



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 502 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 6000W ps/2600W rms





-1/1

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

## **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.

VHF, UHF



| Front View. Transposer and Transmitter Ver | rsion |
|--|-------|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA  |                |                  |            |            |              |                     |         |                   |                             |  |   |
|----------------------|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models               | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 502UB ARK-6 HE   | UHF            | AB               | 30 RU      | 2          | SCA202HE     | 1+5/8"              | Air     | 1                 | -39                         | 2600 W   | 6000 W                                    |
| SDT 502UM ARK-6 HE   | UHF            | AB               | 40 RU      | 4          | SCA102HE     | 1+5/8"              | Air     | 1                 | -39                         | 2600 W   | 6000 W                                    |
| SDT 502UB-W ARK-6 HE | UHF            | AB               | 40 RU      | 2          | SCA202HE-W   | 1+5/8"              | Liquid  | 1                 | -39                         | 2600 W   | 6000 W                                    |
| SDT502UB ARK-6       | UHF            | AB               | 30 RU      | 2          | SCA202UB     | 1+5/8"              | Air     | 1                 | -36                         | 1300 W   | 5000 W                                    |
| SDT502UB-W ARK-6     | UHF            | AB               | 40 RU      | 2          | SCA202UB-W   | 1+5/8"              | Liquid  | 1                 | -36                         | 1300 W   | 5000 W                                    |
| SDT 502UM ARK-6      | UHF            | AB               | 40 RU      | 4          | SCA102UB     | 1+5/8"              | Air     | 1                 | -36                         | 1300 W   | 5000 W                                    |
| SDT 502TB ARK-6      | VHF (III)      | AB               | 30 RU      | 2          | SCA202TB     | 1+5/8"              | Air     | 1                 | -36                         | 1300 W   | 5000 W                                    |
| SDT 502TB-W ARK-6    | VHF (III)      | AB               | 40 RU      | 2          | SCA202TB-W   | 1+5/8"              | Liquid  | 1                 | -36                         | 1300 W   | 5000 W                                    |
| SDT 502TM ARK-6      | VHF (III)      | AB               | 40 RU      | 4          | SCA102TB     | 1+5/8"              | Air     | 1                 | -36                         | 1300 W   | 5000 W                                    |

Specifications and characteristics are subject to change without notice.



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 532 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 9000W ps/3900W rms





-v/W

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# **Main Features**

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:

#### VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

• Video Source Coding:

### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



| Front View. Transpos | er and Transmitter Vers | ion |
|----------------------|-------------------------|-----|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA  |                |                  |            |            |              |                     |         |                   |                             |  |   |
|--|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models   | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 532UB-W ARK-6 HE   | UHF            | AB               | 40 RU      | 3          | SCA202HE-W   | 1+5/8"              | Liquid  | 1                 | -39                         | 3900 W   | 9000 W                                    |
| SDT 532UB-W ARK-6  | UHF            | AB               | 40 RU      | 3          | SCA202UB-W   | 1+5/8"              | Liquid  | 1                 | -36                         | 2000 W   | 7500 W                                    |
| SDT 532TB-W ARK-6  | VHF (III)      | AB               | 40 RU      | 3          | SCA202TB-W   | 1+5/8"              | Liquid  | 1                 | -36                         | 2000 W   | 7500 W                                    |
| Specifications and characteristics are subject to change without notice. |                |                  |            |            |              |                     |         |                   |                             |  |   |



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 103 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 12000W ps/5200W rms





-v/W

# Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

## • Video Source Coding:

**Option Features** 

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.

VHF, UHF



| Front View. Transposer and Transmitter Ver | rsion |
|--|-------|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA  |                |                  |            |            |              |                     |         |                   |                             |  |   |
|----------------------|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models               | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 103UM ARK-6 HE   | UHF            | AB               | 40 RU      | 4          | SCA202HE     | 3+1/8"              | Air     | 1                 | -39                         | 5200 W   | 12000 W                                   |
| SDT 103UM-W ARK-6 HE | UHF            | AB               | 40 RU      | 4          | SCA202HE     | 3+1/8"              | Liquid  | 1                 | -39                         | 5200 W   | 12000 W                                   |
| SDT 103UM ARK-6      | UHF            | AB               | 40 RU      | 4          | SCA202UB     | 3+1/8"              | Air     | 1                 | -36                         | 2600 W   | 10000 W                                   |
| SDT 103UM-W ARK-6    | UHF            | AB               | 40 RU      | 4          | SCA202UB-W   | 3+1/8"              | Liquid  | 1                 | -36                         | 2600 W   | 10000 W                                   |
| SDT 103TM ARK-6      | VHF (III)      | AB               | 40 RU      | 4          | SCA202TB     | 3+1/8"              | Air     | 1                 | -36                         | 2600 W   | 10000 W                                   |
| SDT 103TM-W ARK-6    | VHF (III)      | AB               | 40 RU      | 4          | SCA202TB-W   | 3+1/8"              | Liquid  | 1                 | -36                         | 2600 W   | 10000 W                                   |

Specifications and characteristics are subject to change without notice.



GUI, modulation page.







#### GUI, main page.



GUI, linear pre correction page.

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# SDT 123 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 12500W ps/3200W rms





-v/W

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# **Main Features**

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



| Front View. Transpo | ser and Transmitter Vers | ion |
|---------------------|--------------------------|-----|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA   |                |                  |            |            |              |                     |         |                   |                             |  |   |
|---|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models  | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 123UM-W ARK-6   | UHF            | AB               | 40 RU      | 5          | SCA202UB-W   | 3+1/8"              | Liquid  | 1                 | -36                         | 3200 W   | 12500 W                                   |
| SDT 123TM-W ARK-6   | VHF (III)      | AB               | 40 RU      | 5          | SCA202TB-W   | 3+1/8"              | Liquid  | 1                 | -36                         | 3200 W   | 12500 W                                   |
| Securifications and observativities are subject to observative action |                |                  |            |            |              |                     |         |                   |                             |  |   |

Specifications and characteristics are subject to change without notice



#### GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

n Mr

# SDT 133 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 18000W ps/7800W rms







-v/W

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# **Main Features**

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



|                       |                         | Terr Res a |
|-----------------------|-------------------------|------------|
| Front View. Transpose | r and Transmitter Versi | on         |



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA  |                |                  |            |            |              |                     |         |                   |                             |  |   |
|--|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models   | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 133UM-W ARK-6 HE   | UHF            | AB               | 2 x 40 RU  | 6          | SCA202HE-W   | 3+1/8"              | Liquid  | 1                 | -39                         | 7800 W   | 18000 W                                   |
| SDT 133UM-W ARK-6  | UHF            | AB               | 2 x 40 RU  | 6          | SCA202UB-W   | 3+1/8"              | Liquid  | 1                 | -36                         | 6000 W   | 16000 W                                   |
| SDT 133TM-W ARK-6  | VHF (III)      | AB               | 2 x 40 RU  | 6          | SCA202TB-W   | 3+1/8"              | Liquid  | 1                 | -36                         | 6000 W   | 16000 W                                   |
| Specifications and characteristics are subject to change without notice. |                |                  |            |            |              |                     |         |                   |                             |  |   |



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 203 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 24000W ps/10000W rms







-v/W



> SDT 203 W ARK-6 Liquid Cooled Version

# Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries - to increase manageability of investment through reduction of transmitter types - and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface: or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation: Bandwidth:
- COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

## • Video Source Coding:

## **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.

VHF, UHF



| Front View. Transposer and Transmitter Ver | rsion |
|--|-------|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

| MODEL SPECIFIC DATA  |                |                  |            |            |              |                     |         |                   |                             |  |   |
|----------------------|----------------|------------------|------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|
| Models               | Output<br>Band | Working<br>Class | Dimensions | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |
| SDT 203UM ARK-6 HE   | UHF            | AB               | 2 x 40 RU  | 8          | SCA202HE     | 3+1/8"              | Air     | 2                 | -39                         | 10000 W  | 24000 W                                   |
| SDT 203UM-W ARK-6 HE | UHF            | AB               | 2 x 40 RU  | 8          | SCA202HE     | 3+1/8"              | Liquid  | 2                 | -39                         | 10000 W  | 24000 W                                   |
| SDT 203UM ARK-6      | UHF            | AB               | 2 x 40 RU  | 8          | SCA202UB     | 3+1/8"              | Air     | 2                 | -36                         | 5000 W   | 20000 W                                   |
| SDT 203UM-W ARK-6    | UHF            | AB               | 2 x 40 RU  | 8          | SCA202UB-W   | 3+1/8"              | Liquid  | 2                 | -36                         | 5000 W   | 20000 W                                   |
| SDT 203TM ARK-6      | VHF (III)      | AB               | 2 x 40 RU  | 8          | SCA202TB     | 3+1/8"              | Air     | 2                 | -36                         | 5000 W   | 20000 W                                   |
| SDT 203TM-W ARK-6    | VHF (III)      | AB               | 2 x 40 RU  | 8          | SCA202TB-W   | 3+1/8"              | Liquid  | 2                 | -36                         | 5000 W   | 20000 W                                   |

Specifications and characteristics are subject to change without notice.



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

n Nr

# SDT 303 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 36000W ps/15000W rms – Liquid Cooled Version



> SDT 303 ARK-6 With Liquid Cooling and Dual Driver Option





-v/v

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

# Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264
- Video Source Coding:

### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.

VHF, UHF



| Front View. Transpos | er and Transmitter Vers | ion |
|----------------------|-------------------------|-----|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|                           | MODEL SPECIFIC DATA |                  |                     |            |              |                     |         |                   |                             |  |   |  |
|---------------------------|---------------------|------------------|---------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|--|
| Models                    | Output<br>Band      | Working<br>Class | Dimensions          | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |  |
| SDT 303UM-W ARK-6 HE      | UHF                 | AB               | 3 X 40 RU           | 12         | SCA202HE-W   | 4+1/2"              | Liquid  | 4                 | -39                         | 15000 W  | 36000 W                                   |  |
| SDT 303UM-W ARK-6         | UHF                 | AB               | 3 X 40 RU           | 12         | SCA202UB-W   | 4+1/2"              | Liquid  | 4                 | -36                         | 7800 W   | 32000 W                                   |  |
| SDT 303TM-W ARK-6         | VHF (III)           | AB               | 3 X 40 RU           | 12         | SCA202TB-W   | 4+1/2"              | Liquid  | 4                 | -36                         | 7800 W   | 32000 W                                   |  |
| Specifications and charac | teristics are       | subject to chai  | nge without notice. |            |              |                     |         |                   |                             |  |   |  |



#### GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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# SDT 403 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitter up to 48000W ps/20000W rms – Liquid Cooled Version



<sup>&</sup>gt; SDT 403 ARK-6 W Liquid Cooled - Version with Dual Driver Option





-n/h

## Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

## Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

## • Video Source Coding:

### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.

VHF, UHF



| Front View. Transposer and Transmitter Ver | rsion |
|--|-------|



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version

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|---|---|-----|-----|--|-----|---|-------|----|
|   | • | • • | 993 |  |     |   |       | 10 |

Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|                           | MODEL SPECIFIC DATA |                  |                     |            |              |                     |         |                   |                             |  |   |  |
|---------------------------|---------------------|------------------|---------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|--|
| Models                    | Output<br>Band      | Working<br>Class | Dimensions          | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |  |
| SDT 403UM-W ARK-6 HE      | UHF                 | AB               | 4 X 40 RU           | 16         | SCA202HE-W   | 4+1/2"              | Liquid  | 4                 | -39                         | 20000 W  | 48000 W                                   |  |
| SDT 403UM-W ARK-6         | UHF                 | AB               | 4 X 40 RU           | 16         | SCA202UB-W   | 4+1/2"              | Liquid  | 4                 | -36                         | 10000 W  | 40000 W                                   |  |
| SDT 403TM-W ARK-6         | VHF (III)           | AB               | 4 X 40 RU           | 16         | SCA202TB-W   | 4+1/2"              | Liquid  | 4                 | -36                         | 10000 W  | 40000 W                                   |  |
| Specifications and charac | teristics are       | subject to char  | nge without notice. |            |              |                     |         |                   |                             |  |   |  |



GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

NN

# SDT 603 ARK-6

# Heterodyne Transposer, Regenerative Transmitter, Transmitte up to 72000W ps/30000W rms – Liquid Cooled Version



> SDT 603 ARK-6 With Dual Driver Option and Liquid Cooling



# Image: Arrow Color Image: Arrow Color Arrow Color Image: Arrow Color</t

-v/v

# Description

The New SDT ARK-6 Series is the result of years of research and represents the state of the art of the worldwide transmitter technology.

We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

It is perfect for both international broadcasters which have business in several countries – to increase manageability of investment through reduction of transmitter types – and national broadcasters, due for its versatility in operation modes and configuration. In fact it can be used as a transmitter, a heterodyne transposer, a regenerative transmitter, all in a single hardware.

ARK-6 UNIVERSAL DRIVER is resilient to future evolutions of technology and standardization: this DRIVER guarantees a perfect upgrade path for new modulation schemes that the researchers will delivery.

Besides ARK-6 UNIVERSAL DRIVER already implements DVB-T/T2, ATSC/MH, ISDB-T, DTMB, ATV, DAB modulations.

The SDT ARK-6 allows selection of transmission modes in various ways: remotely, using a dry contact; via SNMP commands; via TCP/IP, using the Web graphic interface; or even via a dedicated command inserted into the transport stream. Functional interfaces are available for total remote control of the apparatus by means of serial protocols or TCP/IP ports. Thanks to the internal Web server the apparatus can be easily monitored and configured and updated using a LAN connection and a standard Web browser. More over, the built-in SNMP agent allows full automated remote control.

## Main Features

- Frequency:
- Modulation:
- Sub-carrier Modulation:
  Bandwidth:
- VHF, UHF COFDM/single carrier 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM 6MHz, 7 MHz, 8 MHz MPEG2, H.264

# • Video Source Coding:

### **Option Features**

• Based on Software Defined Technology (SWDT), ARK6 Modulator allows the definition of different operative modes on the same hardware platform.



|                       |                         | Terr Res a |
|-----------------------|-------------------------|------------|
| Front View. Transpose | r and Transmitter Versi | on         |



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version with CAM

| General Specifications        |  |
|-------------------------------|--|
|                               |  |
| Cooling System                | Forced air/liquid cooling                                      |
| Local control and monitoring  | Extensive front panel control<br>Local terminal on RS-232      |
| Remote control and monitoring | Web based Java Interface<br>Telnet access via Ethernet<br>SNMP |
| Operating Temperature         | -10°C to +45°C   |
| Maximum relative humidity     | 90%, non condensing  |
| Maximum operating altitude    | 2500 m a.s.l. (> 2500 m on request)                            |
| Mains power supply            | 90-260 V AC  |

|                           | MODEL SPECIFIC DATA |                  |                     |            |              |                     |         |                   |                             |  |   |  |  |
|---------------------------|---------------------|------------------|---------------------|------------|--------------|---------------------|---------|-------------------|-----------------------------|--|---|--|--|
| Models                    | Output<br>Band      | Working<br>Class | Dimensions          | N.<br>Ampl | kind of Ampl | Output<br>Connector | Cooling | Meter<br>board N. | Shoulders @ Fo ±<br>4.3 MHz | Digital output power<br>(rms) without Filter<br>DTMB | Nominal analog output<br>power (p.s.) ATV |  |  |
| SDT 603UM-W ARK-6 HE      | UHF                 | AB               | 6 X 40 RU           | 24         | SCA202HE-W   | 6+1/8"              | Liquid  | 6                 | -39                         | 30000 W  | 72000 W                                   |  |  |
| SDT 603UM-W ARK-6         | UHF                 | AB               | 6 X 40 RU           | 24         | SCA202UB-W   | 6+1/8"              | Liquid  | 6                 | -36                         | 15000 W  | 64000 W                                   |  |  |
| SDT 603TM-W ARK-6         | VHF (III)           | AB               | 6 X 40 RU           | 24         | SCA202TB-W   | 6+1/8"              | Liquid  | 6                 | -36                         | 15000 W  | 64000 W                                   |  |  |
| Specifications and charac | teristics are       | subject to chai  | nge without notice. |            |              |                     |         |                   |                             |  |   |  |  |



#### GUI, modulation page.



Screen Service



#### GUI, main page.



GUI, linear pre correction page.

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-v/w

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