

Transmitters DTMB

Product Catalogue 2Q 2013

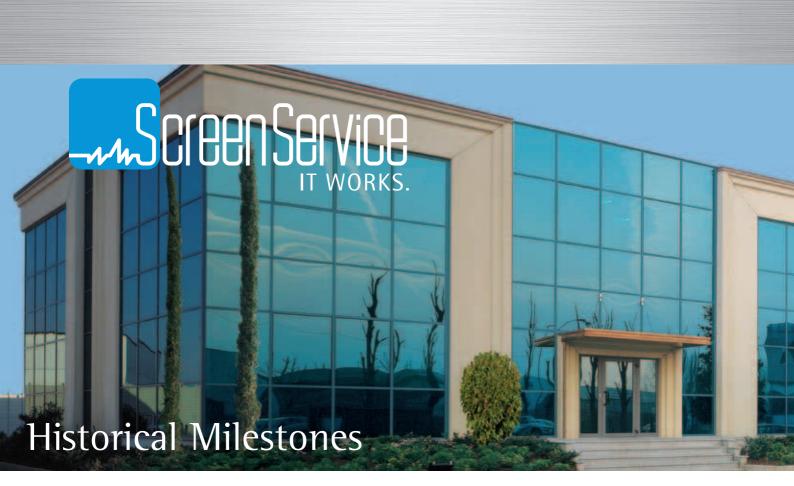




Screen Service is a worldwide known company focused on turn key and end-to-end solutions for all broadcaster needs.

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





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.

20005

- 2004: SSI acquires a 39% stake in Innovaction S.r.l., 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.

2006S

- 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".

2007s

- 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 computer graphics

- 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 broadcasters 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.



2010s 2011s

Screen Service

America LLC

100%

 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.

Screen Service do Brasil Ltda. 100%

Screen Service Broadcasting Technologies S.p.A.

Skylinks s.r.l. 100%

Tivuitalia S.p.A. 100%

Table of Contents

4 SDT ARK-6 DMBT Series

SDT ARK-6 SERIES. Spe	cifications		4
SDT 200 ARK-6	20W ps/2,5W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter,	10
SDT 500 ARK-6	50W ps/12W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter,	12
SDT 201 ARK-6	400W ps/150W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter,	14
SDT 201 ARK-6 NC	450W ps/150W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter,	16
SDT 501 ARK-6 Compact	800W ps/300W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	18
SDT 501 ARK-6	1000W ps/350W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	20
SDT 102 ARK-6	2000W ps/700W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	22
SDT 202 ARK-6	3000W ps/1300W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	24
SDT 502 ARK-6	6000W ps/2600W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	26
SDT 532 ARK-6	9000W ps/3900W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	28
SDT 103 ARK-6	12000W ps/5200W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	30
SDT 123 ARK-6	12500W ps/3200W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	32
SDT 133 ARK-6	18000W ps/7800W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	34
SDT 203 ARK-6	24000W ps/10000W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter	36
SDT 303 ARK-6	36000W ps/15000W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter, Liquid Cooled Version	38
SDT 403 ARK 6	48000W ps/20000W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter, Liquid Cooled Version	40
SDT 603 ARK-6	72000W ps/30000W rms	Heterodyne Transposer, Regenerative Transmitter, Transmitter, Liquid Cooled Version	42





-1/h/-

SDT ARK-6 Series



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 configurations: Satellite Receiver w DEC w/o CAM, Regenerative Trasmitter, Analog A/V Input, Transmitter only.





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.

HARDWARE OPTIONS

For at Ford			STAN	DARD		
Front-End	ATV	DVB-T/H	DVB-T2	ISDBT	ATSC	DMBT
None	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter	Transmitter
DIGITALIZER AA/ VV Input option	Transmitter with A/V analog inputs	X	X	X	X	X
DVB-S/S2	X	Transmitter with DVB-S/S2 RF input	Transmitter with DVB-S/S2 RF input			
DVB-S/S2 + CAM	X	Transmitter with DVB-S/S2 RF input (with CAM)	Transmitter with DVB-S/S2 RF input (with CAM)			
DVB-T/T2	Х	Regenerative Tran- sposer / Heterodyne Transposer / GF Echo Canceller	Regenerative Tran- sposer / Heterodyne Transposer / GF Echo Canceller	X	X	X
ISDBT	Х	X	X	Regenerative Tran- sposer / Heterodyne Transposer / GF Echo Canceller	X	X
ATSC	Х	X	X	X	Regenerative Tran- sposer / Heterodyne Transposer / GF Echo Canceller	X

Specifications



Front View. Transmitter with Satellite Receiver

1. DVB-S2 Input Configuration - Satellite Input Specifications

- N. SAT Inputs: 1
- Demodulator: STV-0900AAB
- 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).
- DiSFaC: 2.0
- TS interface: broadcast reception and ISI filtering supported.
- Supported standards: ETSI EN 302 307 V1.1.1 (DVB-S2)
- DVB-T/T2 available



Front View. Transmitter with Satellite Receiver with DEC and CAM

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

- N. GPS Inputs: 1
- Demodulator: STV-0900AAB
- 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).
- DiSEgC: 2.0
- TS interface: broadcast reception and ISI filtering supported.
- Common Interface:
- N° card slots: 1
- Type: PCMCIA
- Supported CAM:
- Supported standards: ETSI EN 302 307 V1.1.1 (DVB-S2)
- DVB-T/T2, ITU available



Front View. Transposer and Regenerative Transmitter

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

- N. RF Inputs: 1
- Demodulator: Sony CX02820R
- 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



w/w----

Specifications



4. DVB-T/T2 Configuration

- Inputs: 4 ASI and 2 TSoIP channels
- 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
- Video digitizer: Texas Instruments TVP5146
- Connector type: BNCInput 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
 - 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
- 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:
ASI/SSI/SDI Input	Connectors used as ASI, SMPTE-310 or SDI: N' Inputs: 4 Connector type: BNC Input impedance: 75 ohm Input voltage: 800 mVpp (500 to 1200mVpp) Supported standards: CEI EN 50083-9 SMPTE 310 SMPTE 259M
PS RF Input	N° Inputs: 1 Sensitivity: –185dBW Connectors: TNC
10 MHz Input	N° Inputs: 1 Connector: BNC Input impedance: 50 ohm Input voltage: 2 Vpp
1PPS Input	N° Inputs: 1 Connector: BNC Input impedance: 50 ohm Input voltage: ITL (min 1,7V) Pulse width: 100us
ASI Output Monitor	Connectors used for monitoring purposes: N° outputs: 2 Connector Type: BNC Input impedance: 75 ohm Input voltage: 800 mVpp (500 to 1200mVpp) Supported standards: CEL EN 50083-9
10 MHz Output	N° outputs: 1 Connector: SMB Output impedance: 50 ohm Output voltage: 2 Vpp
1PPS Output	N° Outputs: 1 Connector: SMB Z load: 50 ohm Output voltage: TTL (min 2,4V) Pulse width: 100us
Gigabit Ethernet	N° connectors: 2 Connector: RJ45 Supported standards: IEEE 802.3
Relays	N° outputs: 4 Connectors: SUB-D 25p Female Max voltage: 125VAC / 60VDC @ 0,3A – 30VDC @ 1A
Opto	N° inputs: 4 Connectors: SUB-D 25p Female Max current: -5 mA
RF Front-End input	Please refer to various configurations for a complete description of all the available Front-end modules
RF Measure board inputs	N° Inputs: 1 Connector type: Input impedance: 50 ohm Input impedance: 50 ohm Input level: -40 dB up to -8.5 dB Supported standards: DVB-T/H ISDB-T ATSC DVB-T2
DB9 - RS232	N° inputs: 1 Se-ed: up to 230400 bps Be-bit data No parity bits 1 stop bit
DB9 – RS485 CAM BUS	N° inputs: 1
DB15 - TLC	N° inputs: 1
DB25 - TLS	N° inputs: 1



Frequency range	UHF (Band IV/V)	470 to 862 MHz, in 1 Hz Step
rrequeriey range	VHF (Band III)	170 to 255 MHz, in 1 Hz Step
	VIII (Balla III)	170 to 255 WHZ, III 1 112 Step
Available standards		DVB-T, DVB-T2, DVB-H, ISDB-Tb, ATSC, ATSC Mobile
(all standars are full	Digital TV	
compliant)		DTV,DTMB
, ,	Digital Audio Broadcasting	DAB,DAB+,T-DMB
	Analog TV	B/G, D/K, M, M1, N, I, I1
	7 tildreg i v	
Dawar Cumply	AC Line Voltage	380 to 415 (3 phases), 208 to 240 Delta or Star; 47
Power Supply	AC Line 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
		°C per 300 m Above Mean Sea Level
	Relative humidity	95 %, not-condensing
	Cooling method	Forced Air / liquid with external heat exchanger with
	Tooming meaned	redounded fan
DE output	Output nower variation range	+0,5 to -10 dB
RF output	Output power variation range RF load impedance	50 Ohm
		Power reduction after exceeding the set value or
	VSWR	switch off after three attempts
	RF Output connector	See Specific Data Sheet
	The Output connector	See Specific Bata 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	1pps (1 Hz, TTL, BNC)
	nererence puise	1ρμ3 (1 112, 111, 1110)
Operations Control and	5 .	
Monitoring	Remote	Web based Java Interface
<u>_</u>		SNMP
		Telnet access via ethernet
	Local	Extensive front panel control
		Local terminal on RS232
Compliance and		
Conformity	RoHS	2002/95/EC
Comonincy	R&πE	1999/5/EC
	Safety	EN 60215
	EMC	EN 301-4891-1
	FCC	Part 73
	WEEE	2002/96/EC
	Manufacturing	ISO 9001:2008

Models Selection Guide

Models	Output Band	Working Class	Dimensions	N. Ampl	kind of Ampl	Output Connector	Cooling	Meter board N.	Shoulders @ Fo ± 4.3 MHz	Digital output power (rms) without Filter DTMB	Nominal analog outp 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	А	1 RU (19" rack), 400 mm	1		N	Air	-	-36	2,5 W	80 W
SDT 200TB ARK-6	VHF (III)	А	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		N	Air	-	-39	150 W	400 W
SDT 201UB ARK-6 C SDT 201UB ARK-6 HE	VHF (III)	AB AB	2 RU (19" rack), 400 mm 1 +3 RU	1		N N	Air	-	-36 -39	80 W 150 W	250 W 450 W
SDT 201UB ARK-6	UHF	AB	1 +3 RU	1		N N	Air	-	-36	80 W	250 W
SDT 201TB ARK-6	VHF (III)	AB	1 +3 RU	1		N	Air	_	-36	80 W	250 W
SDT 501UB ARK-6 HE C	UHF	AB	3 RU	1		7/16	Air	-	-39	300 W	800 W
SDT 501UB ARK-6 C	UHF	AB	3 RU	1		7/16	Air	-	-36	150 W	700 W
SDT 501TB ARK-6 C	VHF (III)	AB	3 RU	1		7/16	Air	-	-36	150 W	700 W
SDT 501UB ARK-6 HE	UHF	AB	15 RU (4+1)	1	SCA501	7/8	Air	-	-39	350 W	1000 W
SDT 501UB ARK-6	UHF	AB	15 RU (4+1)	1	SCA501	7/8	Air	-	-36	150 W	700 W
SDT 501TB ARK-6	VHF (III)	AB	15 RU (4+1)	1	SCA501	7/8	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 SDT 102TM ARK-6	VHF (III)	AB AB	1+5 RU 30 RU	2	SCA102TB SCA501TB	7/16 7/16	Air		-36 -36	300 W	1400 W
SDT 202UB ARK-6 HE	UHF	AB	30 KU 1+5 RU	1	SCA5011B SCA202HE	7/16	Air		-36	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	7/8	Air	1	-39	2600 W	6000 W
SDT 502UM ARK-6 HE	UHF	AB	40 RU	4	SCA102HE	7/8	Air	1	-39	2600 W	6000 W
SDT 502UB-W ARK-6 HE	UHF	AB	40 RU	2	SCA202HE-W	7/8	Liquid	1	-39	2600 W	6000 W
SDT502UB ARK-6	UHF	AB	30 RU	2	SCA202UB	7/8	Air	1	-36	1300 W	5000 W
SDT502UB-W ARK-6	UHF	AB	40 RU	2	SCA202UB-W	7/8	Liquid	1	-36	1300 W	5000 W
SDT 502UM ARK-6	UHF	AB	40 RU	4	SCA102UB	7/8	Air	1	-36	1300 W	5000 W
SDT 502TB ARK-6 SDT 502TB-W ARK-6	VHF (III)	AB AB	30 RU 40 RU	2	SCA202TB SCA202TB-W	7/8 7/8	Air Liquid	1	-36 -36	1300 W	5000 W 5000 W
SDT 502TM ARK-6	VHF (III)	AB	40 RU	4	SCA202TB=W	7/8	Air	1	-36	1300 W	5000 W
SDT 532UB-W ARK-6 HE	UHF	AB	40 RU	3	SCA202HE-W	7/8	Liquid	1	-39	3900 W	9000 W
SDT 532UB-W ARK-6	UHF	AB	40 RU	3	SCA202UB-W	7/8	Liquid	1	-36	2000 W	7500 W
SDT 532TB-W ARK-6	VHF (III)	AB	40 RU	3	SCA202TB-W	7/8	Liquid	1	-36	2000 W	7500 W
SDT 103UM ARK-6 HE	UHF	AB	40 RU	4	SCA202HE	7/8	Air	1	-39	5200 W	12000 W
SDT 103UM-W ARK-6 HE	UHF	AB	40 RU	4	SCA202HE	7/8	Liquid	1	-39	5200 W	12000 W
SDT 103UM ARK-6	UHF	AB	40 RU	4	SCA202UB	7/8	Air	1	-36	2600 W	10000 W
SDT 103UM-W ARK-6	UHF	AB	40 RU	4	SCA202UB-W	7/8	Liquid	1	-36	2600 W	10000 W
SDT 103TM ARK-6	VHF (III)	AB	40 RU	4	SCA202TB	7/8	Air	1	-36	2600 W	10000 W
SDT 103TM-W ARK-6	VHF (III)	AB	40 RU	4	SCA202TB-W	7/8	Liquid	1	-36	2600 W	10000 W
SDT 123UM-W ARK-6	UHF (III)	AB	40 RU	5	SCA202UB-W	7/8	Liquid	1	-36	3200 W	12500 W
SDT 123TM-W ARK-6 SDT 133UM-W ARK-6 HE	VHF (III)	AB AB	40 RU 2 x 40 RU	5	SCA202TB-W SCA202HE-W	7/8	Liquid Liquid	1	-36 -39	3200 W 7800 W	12500 W 18000 W
SDT 133UM-W ARK-6 HE	UHF	AB	2 x 40 RU 2 x 40 RU	6	SCA202HE-W SCA202UB-W	7/8	Liquid	1	-39	6000 W	16000 W
SDT 133TM-W ARK-6	VHF (III)	AB	2 x 40 RU	6	SCA2020B-W	7/8	Liquid	1	-36	6000 W	16000 W
SDT 203UM ARK-6 HE	UHF	AB	2 x 40 RU	8	SCA202HE	7/8	Air	2	-39	10000 W	24000 W
SDT 203UM-W ARK-6 HE	UHF	AB	2 x 40 RU	8	SCA202HE	7/8	Liquid	2	-39	10000 W	24000 W
SDT 203UM ARK-6	UHF	AB	2 x 40 RU	8	SCA202UB	7/8	Air	2	-36	5000 W	20000 W
SDT 203UM-W ARK-6	UHF	AB	2 x 40 RU	8	SCA202UB-W	7/8	Liquid	2	-36	5000 W	20000 W
SDT 203TM ARK-6	VHF (III)	AB	2 x 40 RU	8	SCA202TB	7/8	Air	2	-36	5000 W	20000 W
SDT 203TM-W ARK-6	VHF (III)	AB	2 x 40 RU	8	SCA202TB-W	7/8	Liquid	2	-36	5000 W	20000 W
SDT 303UM-W ARK-6 HE	UHF	AB	3 X 40 RU	12	SCA202HE-W	7/8	Liquid	4	-39	15000 W	36000 W
SDT 303UM-W ARK-6	UHF	AB	3 X 40 RU	12	SCA202UB-W	7/8	Liquid	4	-36	7800 W	32000 W
SDT 303TM-W ARK-6	VHF (III)	AB	3 X 40 RU	12	SCA202TB-W	7/8	Liquid	4	-36	7800 W	32000 W
SDT 403UM-W ARK-6 HE	UHF	AB	4 X 40 RU	16	SCA202HE-W	7/8	Liquid	4	-39	20000 W	48000 W
SDT 403UM-W ARK-6 SDT 403TM-W ARK-6	UHF VHF (III)	AB AB	4 X 40 RU 4 X 40 RU	16	SCA202UB-W SCA202TB-W	7/8	Liquid	4	-36	10000 W	40000 W
SDT 603UM-W ARK-6 HE	UHF	AB	6 X 40 RU	16 24	SCA2021B-W SCA202HE-W	7/8 7/8	Liquid Liquid	6	-36 -39	10000 W 30000 W	40000 W 72000 W
SDT 603UM-W ARK-6 HE	UHF	AB	6 X 40 RU	24	SCA202HE-W SCA202UB-W	7/8	Liquid	6	-39	15000 W	64000 W
SDT 603TM-W ARK-6	VHF (III)	AB	6 X 40 RU	24	SCA2020B-W	7/8	Liquid	6	-36	15000 W	64000 W
	v (III)		57. 10 110	21	30.120210 11	,10	Liquiu		30	.0000 **	J-1000 FF



-v/h-

SDT 000 ARK-6

DTMB Transmitter/modulator up to 1mW rms



> SDT 000 ARK-DTMB

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.

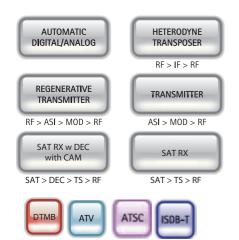
We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

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: VHF, UHF

Modulation: COFDM/single carrier

• Sub-carrier Modulation: 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM

Bandwidth: 6MHz, 7 MHz, 8 MHz
 Video Source Coding: MPEG2, H.264

Option Features





Front View. Transposer and Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version



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 Local terminal on RS-232
Remote control and monitoring	Web based Java Interface Telnet access via Ethernet 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



Front View. Transmitter Version

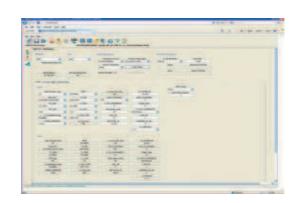
	MODEL SPECIFIC DATA													
Models	Output Band	Working Class	Dimensions	N. Ampl	kind of Ampl	Output Connector	Cooling	Meter board N.	Shoulders @ Fo ± 4.3 MHz	Digital output power (rms) without Filter DTMB	Nominal analog output power (p.s.) ATV			
SDTOOOUA ARK-6	UHF	А	1 RU (19" rack), 400 mm			N	Air	-	-37	1mW	1mW			



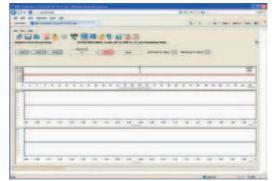
GUI, modulation page.



GUI, input page.



GUI, main page.



GUI, linear pre correction page.



SDT 200 ARK-6

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



> SDT 200 ARK-6

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.

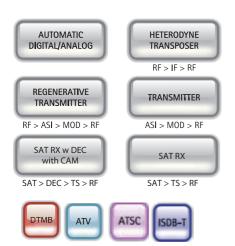
We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

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: VHF, UHF

• Modulation: COFDM/single carrier

• Sub-carrier Modulation: 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM

Bandwidth: 6MHz, 7 MHz, 8 MHz
 Video Source Coding: MPEG2, H.264

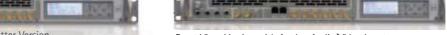
Option Features







Front View. Transposer and Transmitter Version



Front View. Version with Analog Audio/Video Input



Front View. Transmitter with DVB-S2 Receiver Version



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

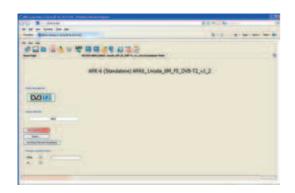
General Specifications	
Cooling System	Forced air/liquid cooling
Local control and monitoring	Extensive front panel control Local terminal on RS-232
Remote control and monitoring	Web based Java Interface Telnet access via Ethernet SNMP
Operating Temperature	-10°C to +45°C
Maximum relative humidity	90%,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



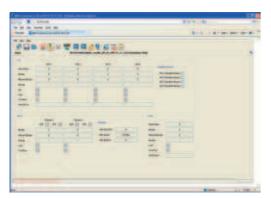
Front View. Transmitter Version

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

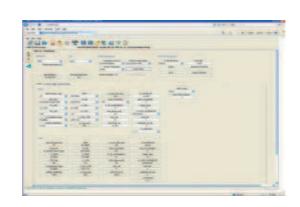
Specifications and characteristics are subject to change without notice.



GUI, modulation page.



GUI, input page.



GUI, main page.



GUI, linear pre correction page.



SDT 500 ARK-6

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



> SDT 500 ARK-6

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.

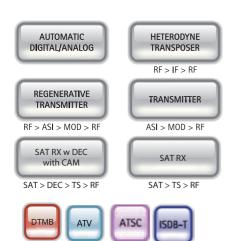
We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

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: VHF, UHF

Modulation: COFDM/single carrier

• Sub-carrier Modulation: 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM

Bandwidth: 6MHz, 7 MHz, 8 MHz
 Video Source Coding: MPEG2, H.264

Option Features







Front View. Transmitter with DVB-S2 Receiver Version



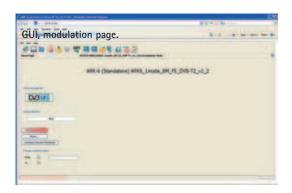
Front View. Transmitter with DVB-S2 Receiver Version with CAM

General Specifications	
Cooling System	Forced air/liquid cooling
Local control and monitoring	Extensive front panel control Local terminal on RS-232
Remote control and monitoring	Web based Java Interface Telnet access via Ethernet 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



Front View. Transmitter Version

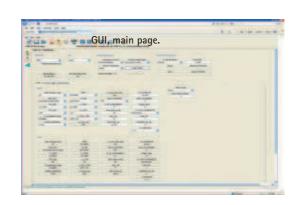
	MODEL SPECIFIC DATA													
Models	Output Band	Working Class	Dimensions	N. Ampl	kind of Ampl	Output Connector	Cooling	Meter board N.	Shoulders @ Fo ± 4.3 MHz	Digital output power (rms) without Filter DTMB	Nominal analog output power (p.s.) ATV			
SDT 500UB ARK-6	UHF	AB	1 RU (19" rack), 400 mm	1	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			



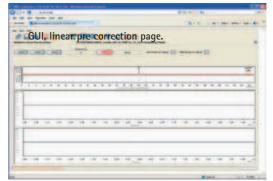
GUI, modulation page.



GUI, input page.



GUI, main page.



GUI, linear pre correction page.



SDT 201 ARK-6 Compact

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



> SDT 201 ARK-6

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.

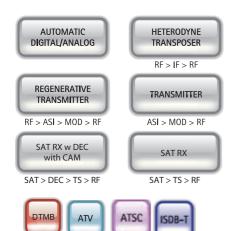
We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

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: VHF, UHF

Modulation: COFDM/single carrier

• Sub-carrier Modulation: 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM

Bandwidth: 6MHz, 7 MHz, 8 MHz
 Video Source Coding: MPEG2, H.264

Option Features







Front View. Transposer and Transmitter Version



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



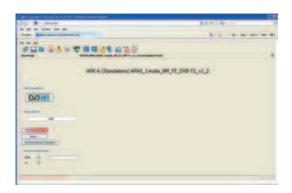
Front View. Version with Analog Audio/Video Input



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 Local terminal on RS-232
Remote control and monitoring	Web based Java Interface Telnet access via Ethernet 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

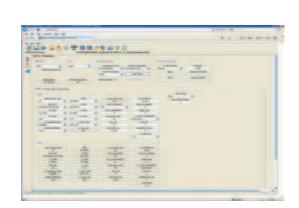
MODEL SPECIFIC DATA											
Models	Output Band	Working Class	Dimensions	N. Ampl	kind of Ampl	Output Connector	Cooling	Meter board N.	Shoulders @ Fo ± 4.3 MHz	Digital output power (rms) without Filter DTMB	Nominal analog output power (p.s.) ATV
SDT 201UB ARK-6 HE C	UHF	AB	2 RU (19" rack), 400 mm	1		N	Air	-	-39	150 W	400 W
SDT 201UB ARK-6 C	VHF (III)	AB	2 RU (19" rack), 400 mm	1		N	Air	-	-36	80 W	250 W
Considerations and observe	Specifications and characteristics are subject to change without notice										



GUI, modulation page.



GUI, input page.



GUI, main page.



GUI, linear pre correction page.



SDT 201 ARK-6

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



> SDT 201 ARK-6 NC

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.

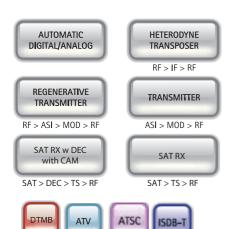
We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

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: VHF, UHF

Modulation: COFDM/single carrier

• Sub-carrier Modulation: 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM

Bandwidth: 6MHz, 7 MHz, 8 MHz
 Video Source Coding: MPEG2, H.264

Option Features







Front View. Transposer and Transmitter Version



Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



Front View. Version with Analog Audio/Video Input



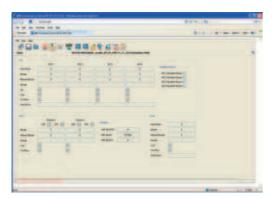
Front View. Transmitter with DVB-S2 Receiver Version with CAM

General Specifications	
Cooling System	Forced air/liquid cooling
Local control and monitoring	Extensive front panel control Local terminal on RS-232
Remote control and monitoring	Web based Java Interface Telnet access via Ethernet 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

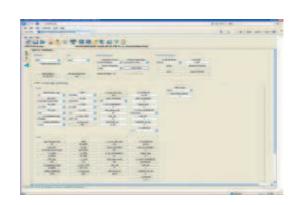
			MODEL SPECIFIC DATA											
	orking ass	Dimensions	N. Ampl	kind of Ampl I	Output Connector	Coolina	Meter board N.	Shoulders @ Fo ± 4.3 MHz	Digital output power (rms) without Filter DTMB	Nominal analog output power (p.s.) ATV				
UHF	AB	1 +3 RU (19" rack), 400 mm	1		N	Air	-	-39	150 W	450 W				
UHF	AB	1 +3 RU (19" rack), 400 mm	1		N	Air	-	-36	80 W	250 W				
HF (III)	AB	1 +3 RU (19" rack), 400 mm	1		N	Air		-36	80 W	250 W				
UI	d CI	d Class HF AB HF AB (III) AB	Dimensions Dimensions	Dimensions Ampl	Dimensions Ampl Kind of Ampl	Class Dimensions Ampl Kind of Ampl Connector	Class Dimensions Ampl kind of Ampl Connector Cooling	Cooling Cooling Connector Cooling Co	Class Dimensions Ampl kind of Ampl Connector Cooling board N. 4.3 MHz	Dimensions Dimensions Ampl Kind of Ampl Connector Cooling Doard N. Shoulders (@ Fo ± 4.3 MHz Crms) without Filter DTMB				



GUI, modulation page.



GUI, input page.



GUI, main page.



GUI, linear pre correction page.



SDT 501 ARK-6 Compact

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



> SDT 501 ARK-6

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.

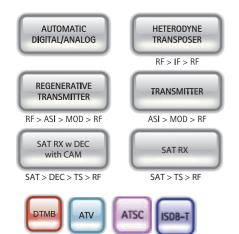
We call it UNIVERSAL DRIVER because of its incredible capability to be all configurations with one hardware and uploading a proper software package.

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: VHF, UHF

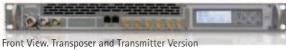
Modulation: COFDM/single carrier

• Sub-carrier Modulation: 4QAM, 4QAM-NR, 16QAM, 32QAM, 64QAM

Bandwidth: 6MHz, 7 MHz, 8 MHz
 Video Source Coding: MPEG2, H.264

Option Features







Front View. Transmitter with DVB-S2 Receiver Version



Front View. Transmitter Version



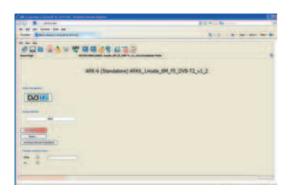
Front View. Version with Analog Audio/Video Input



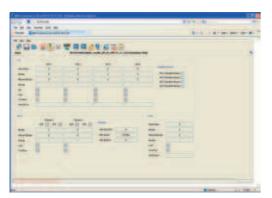
Front View. Transmitter with DVB-S2 Receiver Version with CAM

General Specifications	
Cooling System	Forced air/liquid cooling
Local control and monitoring	Extensive front panel control Local terminal on RS-232
Remote control and monitoring	Web based Java Interface Telnet access via Ethernet 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

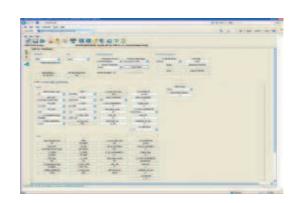
MODEL SPECIFIC DATA											
Models		Working Class	Dimensions	N. Ampl	kind of Ampl	Output Connector	Cooling	Meter board N.	Shoulders @ Fo ± 4.3 MHz	Digital output power (rms) without Filter DTMB	Nominal analog output power (p.s.) ATV
SDT 501UB ARK-6 HE C	UHF	AB	3 RU (19" rack), 400 mm	1		7/16	Air	-	-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



GUI, modulation page.



GUI, input page.



GUI, main page.



GUI, linear pre correction page.

