

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



> SDT 502 ARK-6  
Version with  
Dual Driver Option

> SDT 502 ARK-6  
Liquid Cooled - Version  
with Dual Driver Option

AUTOMATIC  
DIGITAL/ANALOG

ETERODYNE  
TRANSPOSER

RF > IF > RF

REGENERATIVE  
TRANSMITTER

TRANSMITTER

RF > ASI > MOD > RF

ASI > MOD > RF

SAT RX w DEC  
with CAM

SAT RX

SAT > DEC > TS > RF

SAT > TS > RF



### 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 to 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 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

- Transmission in VHF and UHF bands
- MFN and SFN operations
- Internal GPS receiver
- Embedded HTTP server
- RF main and monitoring outputs
- Linear and Non-Linear Adaptive digital pre-correction circuits, when operated as transmitter
- Linear and non-linear digital pre-correction circuits, when operated as repeater
- T2-MI input over IP or ASI
- Modulated DVB-T2 RF signal input (VHF/UHF) – when operating as repeater
- T2-MI input RF signal (VHF/UHF) – specific for SFN gap filler operation
- Signal modulation compliant with ETSI EN-302 755 (DVB-T2) standard 1.3.1
- ETSI EN 300 744 v16.1
- ETSI TS 101 191 v1.4.1
- ETSI EN-102 773 (T2-MI)
- ITU -R BT. 470-7
- Full support of T2 modulation up to 256-QAM including I/Q rotation
- T2-MI compliant with standard
- Full Single-PLP and MPLP compatibility (including MISO and PAPR reduction)
- Up to 16 PLP
- Bit rate adaptation plus PCR restamping in S-PLP

### Option Features

Based on Software Defined Technology (SWDT), ARK6 T2 Modulator allows the definition of different operative modes on the same hardware platform.



# SDT SERIES ARK-6 DVB + ATV

The New SDT ARK-6 SERIES is available in different hardware configurations.



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



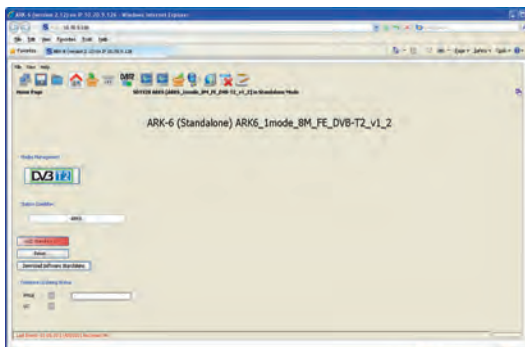
Front View. Transmitter Version

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 VAC, 380 VAC (3 Phases) other available on request

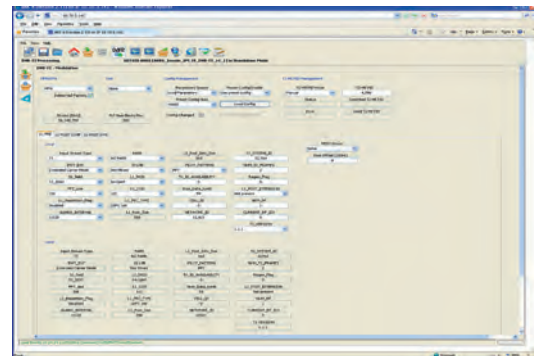
## MODEL SPECIFIC DATA

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 DVB	Nominal analog output 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.



GUI, main page.



GUI, input page.



GUI, linear pre correction page.