The New A08DT202 AK-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 modulate in all schemes (analogue and digital), just 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, an heterodyne transposer, a regenerative transmitter and Single Frequency Echo Canceller (perfect for Single Frequency Network), all in a single hardware and for dual or triple cast operation (Analogue Pal, DVB-T, DVB-T2)

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

Besides AK-6 UNIVERSAL DRIVER already implements DVB-T/T2, PAL, ATSC/MH, NTSC, ISDB-T modulations.

The A08DT202 AK-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.

The transmitter can be used in analogue PAL operation, or in digital DVB-T or DVB-T2 operation or in Dual or Triple Cast operation just uploading the proper software without any hardware modification (part the output RF filter).

Option Features
- Based on Software Defined Technology (SWDT), AK 6 Universal Driver T2 Modulator allows the definition of different operative modes on the same hardware platform.
General
Operating temperature: -10° to 45° C
Maximum relative humidity: 95%
Mains power supply: 90-260V A.C.(others input AC voltages on request)
Cabinet: 19" 30 units High
Cooling: Forced air or
Maximum operating altitude: 2500mt a.s.l (>2500mt on request)
RF output Amplifiers: Hot Plug-in
Exciter Power Supply: Plug in
Final Power Supplies: Easy removable

Analogue Main Features
Available standards: B/G, D/K, M, M1, N, I, I1
Nominal analog output power: 3000W p.s.
Frequency stability: ± 1 pps or external synchronized with 10MHz
External reference frequency: 10MHz (level: -10 + 13 dBm)
In band intermodulation: < -58dBc with linearity precorrector
Harmonics: -70 dBc or better
Spurious emissions: -60 dBc or better (with output filter)
Working class: AB class
Protectations: Overdrive, SWR, over voltage, over current, over temperature
RF monitor: BNC - 0 dBm
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
Maximum operating altitude: 2500mt a.s.l (>2500mt on request)

DVB-T -T2 Main Features
Dual Driver Option
- Nominal analog output power: **1250 W rms** without filter
- T2-MI input over IP or ASI (4 ASI inputs)
- 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
- MFN and SFN operations embedded with old over of 5 hours
- Signal modulation compliant with ETSI EN-302 755 (DVB-T2) standard 1.1.1 and 1.2.1
- ETSI EN 300 744 v16.1
- ETSI TS 101 191 v1.4.1
- ITU -R BT. 470-7
- **Full support of T2 modulation up to 256-QAM including I/Q rotation**
- T2-MI compliant with ETSI EN-102 773 (T2-MI) standard
- DVB-T-T2 transmission on VHF and UHF bands
- Full Single-PLP compatibility (including MISO and PAPR reduction)
- Capable to transmit MPLP
- Up to 16 PLP
- Internal GPS receiver to warranty 5 hours old over
- Bit rate adaptation plus PCR restamping in S-PLP
- 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