



arX

Digital repeaters

TYPES

Air cooled

Liquid cooled

ARX digital retransmitters for multifrequency network for DVB-T/H/T2, ISDB-T and ATSC.



The Elti@ARX family of VHF/UHF digital retransmitters combine Elti's reputation for robust equipment with the latest digital technology available from DVB area and the latest solid state LDMOS technology. The Elti@ARX family is robust, fail-safe, with high efficiency, designed as regenerative digital repeaters, based on the same platform with the same performances as Elti digital transmitters TERX.

The Elti Advantage

- COFDM Supporting each mode according to EN 302 744 (DVB-T) and EN 302 304 (DVB-H), EN 302 755 (DVB-T2), TS 102 831 and TS 102 773 (T2-MI), ARIB STB-B31, TR-B14 (ISDB-T/Tb), A/53, A/110 (ATSC)
- The signal is "refreshed", ie. error-corrected during demodulation using the correction method specified by the digital standard
- The error-corrected transport stream is also available via ASI output for local re-multiplexing or monitoring purposes
- High sensitivity receiver
- Local re-multiplexing possible
- Based on the same platform with the same performances as Elti digital transmitters TERX
- Operation in analogue broadcasting networks possible (optional)

Exciter and compact solutions

The exciter is housed in a compact 19" 1U rack mount and with the AB class amplifier provides up to 50 W of UHF and VHF output power. The high sensitivity input tuner provides optimized reception of the RF DVB signal. The DVB signal is completely demodulated to MPEG-2 or MPEG-4 TS and error-corrected before retransmission in a fresh COFDM spectrum. Error corrected MPEG-2 or MPEG-4 TS is available via ASI output for local re-multi-plexing. ASI input allows the repeater to function also as a transmitter.

Other retransmission functions and performances are the same as for Elti digital transmitters TERX.

Power Amplifier

External amplifiers are available in models supplying 200W, 400W and 800 W (air and liquid cooling) for UHF band and 300W and 600 W (air and liquid cooling) for VHF band. All amplifiers are designed for broadband and employ the latest 50-volt LDMOS technology to guarantee linearity, compact design and high efficiency for minimizing operational costs. Self-protection circuits assure continuous operation and uninterrupted service in sight of minimizing operational costs.

External amplifiers are available also in Doherty configuration. For more details refer to Elti digital transmitters TERX in this catalogue.

Control and monitoring

For retransmitters ARX the same monitoring functionality is provided as for digital transmitters TERX. For more details refer to Elti digital transmitters TERX in this catalogue.

The integrated control unit provides full control over the assembly and additional options/features. Control software EDM (WEB based Elti Device Manager) with an user friendly graphic interface comes as standard for all Elti products. It features:

- Complete device management/configuration over single IP address,
- Multilevel password protection and access control
- Display of operational parameters
- Alarm and error history
- Remote and local operation
- Easy save and restore configuration settings
- Remote assistance and software update

The control software offers the same comprehensive functionality whether used locally or remotely via TCP/IP, SNMP or GSM networks. External connections are provided by:

- Ethernet LAN/WAN for local/network access
- GSM/GPRS modem (optionally)

The central control unit allows integration into any SNMP based telemetry or supervisory system. It offers control and integration of third party equipment into single transmission system.

Digital MFN retransmitter	
Standards	DVB-T/H/T2, ISDB-T and ATSC
Input	N (f), 50 Ohm, 170 ÷ 862 MHz (agile tuning)
Sensitivity	-75 ÷ -15 dBm
Conversion type	to ASI
Return losses	> 15 dB