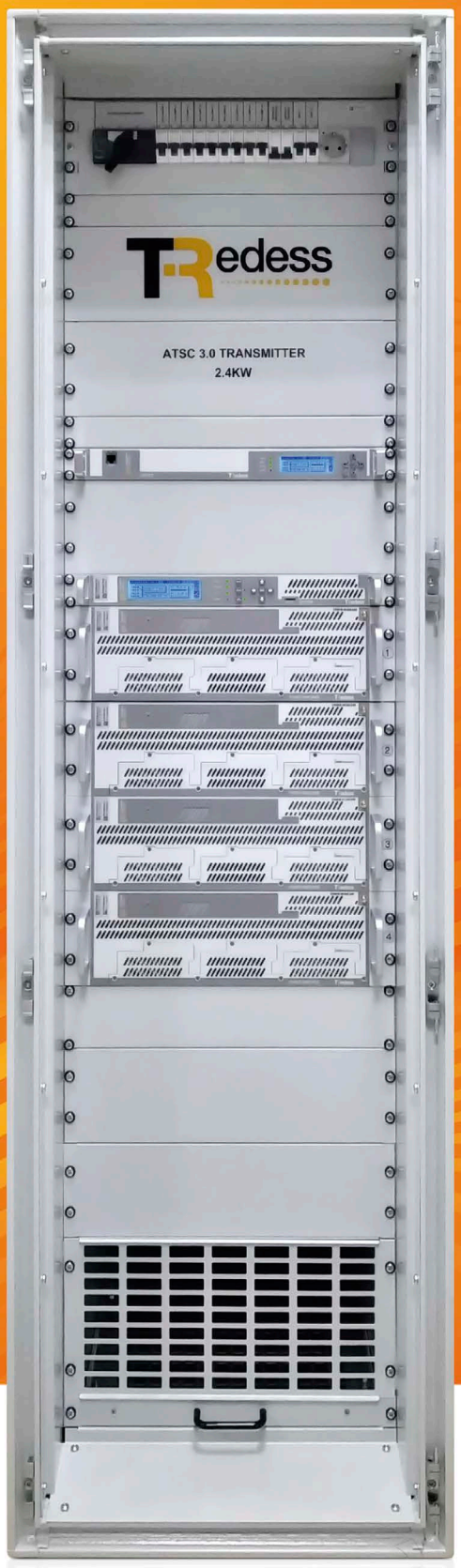
FOURTH SERIES



High performance air-cooled **ATSC 3.0** transmitters for DTT networks

MOST **ADVANCED ATSC 3.0** TECHNOLOGY

ATSC 1.0 TO ATSC 3.0 **DUALCAST MODULATION**

HIGH **RELIABILITY**

HIGH **QUALITY RF SIGNAL** PERFORMANCES

HIGH EFFICIENCY BASED ON **ASYMMETRIC WIDE BAND DOHERTY** AMPLIFIERS

UWB Doherty

Tredess

ATSC 3.0

TRedess solutions for ATSC 3.0 adopters combine the top class RF performance of TRedess ATSC 3.0 Exciter together with the best in class efficiency of TRedess Asymmetrical Wideband Doherty with typical system efficiency 40% covering the complete [470-700 MHz] TV range with the same amplifier module, and consequently obtaining very important cost reductions in energy consumption without impacting the normal operation, maintenance and also optimizing the spares dimensioning.

TREDESS ATSC 3.0 TRANSMITTERS | Technical specifications

Output power (Before filter) COFDM modulations	600 W	1200 W	1800 W	2400 W	3000 W	3600 W	4800 W
Output power (Before filter) ATSC 1.0	750 W	1500 W	2500 W	3000 W	3750 W	4500 W	6000 W
Nº of Amplifiers	1	2	3	4	5	6	8
Final amplifier type	UWB Symmetrical Doherty / UWB Asymmetrical Doherty						
Typical Efficiency	36% in COFDM modulation / 40% in COFDM modulation						
Frequency range	BIII (174-254 MHz) or UHF (470-790 MHz) / UHF (470-700 MHz)						
Standards	ATSC 1.0: A/53, A/54, A64; ATSC 3.0: TG3/S32, Physical Layer, STL						
Inputs	ASI Stream Interface (ATSC 1.0) / 2x ASI input BNC connector - 75 Ω / 1x ASI output BNC connector - 75 Ω 188/204 Bytes - 80 Mbps Max. Packet /burst mode. Gigabit Streaming input (ATSC 3.0) / 4 x 1000 base-T RJ45 ports / Protocols UDP, IP, IGMP (V2 & V3) / STL interface Built-in ALP Encapsulation.						
MER	> 34 dB						
IMD (Shoulder)	> 38 dB						
Digital Adaptative Precorrection	Digital adaptative, linear and non-linear Crest Factor Reduction (PAPR) and Protection clipping						
RF output connector	DIN 7/16	EIA 7/8" (Others under request)	EIA 1 5/8" (Others under request)				
Clock and Synchronization	10 MHz & 1 PPS input/output Onboard GPS						
Control and Monitoring	Ethernet control Port / web GUI and SNMP / Log file LCD Front Panel Display, 2x Gpin & 4 GPOut ports for external switch and PA control Monitoring of MER, left & right shoulders, forwarded & reflected powers						
Operating temperature range	0°C to 45°C						
Relative humidity (max.)	95%, non condensing						
Altitude of operation	≤ 2000 m above sea level (> 2000m on request)						
Cooling	Force air						

Over **17.000 transmitters & gap-fillers** worldwide, in more than **40 countries**

Spain · France · Hungary · Poland · Italy · Portugal · Sweden · Norway
Malta · Faeroe · Ireland · Georgia · Peru · Chile · Brasil · Vietnam
Hong Kong · Thailand · Morocco · Mali · South Africa · Greece
Croatia · USA ...

TRedess

www.tredess.com