

**TRedess DTT TRANSMITTERS 600 W to 2400 W | FOURTH SERIES MEDIUM POWER |** Technical specifications

MAIN CHARACTERISTICS	
Frequency range	UHF Band IV/V 470 to 798 MHz
Standards	DVB-T, DVB-T2, ISDB-T
System Configurations	Single Drive, Dual Drive, 1+1, N+1
INPUTS	
ASI inputs	2x BNC female / 75Ω
TSolIP inputs	2x RJ-45 10/100/1000 Mbps
Encapsulation	UDP / RTP / RTP-FEC
Jitter tolerance	Configurable
DVB-T/T2 input (optional)	1x N female / 50Ω
RF input frequency	470 to 862 MHz
RF Input signal level	-80 dBm to -20 dBm
Noise figure	≤ 6dB
DVB-S/S2 input (optional)	1x N female / 75Ω
RF input frequency	950 MHz to 2150 MHz
Return losses	> 11,5dB
RF Input signal level for a single carrier	-80dBm to -10 dBm
Seamless switching	Programmable seamless switching between all inputs
RF OUTPUT	
Nominal output powers	600W · 1200W · 1800W · 2400W
MER	>34 dB
Shoulder distance	>38 dB
Precorrection	Digital adaptive, linear and non-linear
Power stability	≤ ± 0,5 dB
Return losses	> 20 dB
RF Test output	SMA female / 50 Ω
SYNCHRONIZATION	
10MHz external reference input	BNC female / 50 Ω
10MHz input level	-20 dBm to +10 dBm
1PPS external reference input	BNC female / 50 Ω
1PPS input level	0-5V
GPS/GLONASS receiver (optional)	
10 MHz output	BNC female / 50 Ω
1PPS output	5V TTL
Medium Term Stability	< ±2 × 10 exp-10 / 24 hours
Phase noise (typical, static conditions)	-120 dBc/Hz @10 Hz -135 dBc/Hz @100 Hz
Holdover	< 0.8 μs after 4 hours < 12 μs after 24 hours
GPS/GLONASS antenna (optional)	
Connector	SMA female / 50 Ω
Gain	35 dB typical

OPERATION	
Local control	Front LCD display with keyboard and LED indicators Micro-SD card to save and restore configuration settings.
Remote control and monitoring	Ethernet (Web application and SNMP) I/O contacts
ENVIRONMENTAL	
Operating temperature range	0 to 45°C
Relative humidity (max.)	95%, non condensing
Acoustic noise	< 65 dBA (measured at 1 m distance)
Altitude of operation	≤ 2500 m above sea level
Cooling	Forced air
ELECTRICAL	
AC power supply	00 to 254 VAC · 47 to 66 Hz · 8,75 A max (with one power supply) · 100 to 140 VAC 47 to 66 Hz · 18 A max
Power factor	> 0.95
AC max. power consumption	1820 VA (600W) · 3640 VA (1200W) · 5455 VA (1800W) · 7275 VA (2400W)
Amplifier	Ultra-Wide Band Doherty technology transistors
COMPLIANCE	
Safety	EN 60950-1:2006+A1:2010+A11:2009+A12:2011 EN 60215:1989+A1:92+A2:94
EMC	ETSI EN 301 489-1 V1.9.2 (2011-09) ETSI EN 301 489-14 V1.2.1 (2003-05) EN 61000-4-5, heavy Industry level.
Spectrum efficiency	ETSI EN 302 296-2 V1.2.1 (2011-05)
R&TTE	1999/5/EC
RoHS	2011/65/EU
WEEE	2012/19/EU
Standards	EN 300744 · EN 302755 ARIB STD-B31 v1.6 ABNT NBR15601:2007 TS 101191 · EN 50083-9 · TR 101290 TS 102773 · TS 102831 · TS 102034 ISO/IEC 13818 · RFC 1122 · RFC 791 · RFC 768 RFC 3550 · RFC 2250 · RFC 2733 SMTPE 2022-1/2 · EN 300421 · EN 302307

**Fourth Series Medium Power DTT Transmitter 1200W UWB Doherty**

Front view