



High-efficiency air-cooled VHF Band III DAB+ Transmitters

UWB Doherty

Top class efficiency figures:

- Leading Ultra Wide-Band Doherty implementation.
- Single HW for all the Band III.
- Efficiency optimization algorithm.

State-of-the-art DAB+ modulator:

- Outstanding DAP performance.
- 2x EDI inputs with configurable jitter tolerance.
- Seamless switching between all ETI & EDI inputs.
- Built-in satellite receiver (option)

Optimized redundancy options:

- Dual Drive, 1+1, N+1 distributed architecture.
- Redundant, hot-swap PSUs.
- Robustness and minimal need of spare parts.

Smart operation and maintenance:

- Easy to use web GUI.
- Quality measurements & Spectrum view.
- Advanced Monitoring Tool.

DAB+ Broadcasting is easier with TRedess



Fourth Series DAB+ transmitters are fully designed, developed and manufactured by TRedess in Spain. Focused in optimizing compactness, energy consumption, performance and easy operation, we assure **cost-efficiency** throughout the equipment lifetime, minimizing OPEX.

Our full control of the **manufacturing** and **quality control** processes make us a **reliable** equipment supplier, **flexible** to adapt to our customers and providing a high-quality **support**, based on a deep product knowledge and wide **experience** in the Broadcasting market.

TRedess T-DAB/DAB+/DMB AIR-COOLED TRANSMITTERS | Fourth Series | Technical specifications

Output power (Before filter) COFDM modulations	50/140 W	300 W	600 W	1200 W	1800 W	2400 W
Architecture	Monoblock		DAB+ Modulator (1HU) and Nx 600W Amplifiers (3HU)			
System configurations	Single Drive, 1+1, N+1		Single Drive, Dual Drive, 1+1, N+1			
N° of amplifiers	Standalone transmitter		1	2	3	4
Final amplifier type	LDMOS Class AB		Ultra-Wide-Band Symmetrical Doherty			
Frequency range	174-240 MHz		174-240 MHz			
Standards	T-DAB/DAB+/DMB according to ETSI EN 300 401					
Interfaces	1x ETI input (NI,G703) or (NA,704), BNC (F) 75 Ohms, according to ETSI EN 300 799 2x EDI 100/1000 Base-T RJ-45 (UDP/FEC, IGMP V2 & V3, configurable jitter tolerance) according to ETSI 102 693 Programmable seamless switching between all inputs Built-in satellite receiver with CAM (option)					
MER	> 32 dB					
Precorrection	Digital adaptative, linear and non-linear					
RF output connector	N Female	DIN 7/16 Female		EIA 7/8"	EIA 1 5/8"	
Clock and synchronization	10 MHz & 1 PPS input/output					
GPS/GNSS (Option)	SMA female 50 Ω Connector Stability < ±1x10exp-9 (0°C to 60°C) Holdover: <0.8µs after 4 hours; <12 µs after 24 hours					
Local and Remote Control	Front LCD display with keyboard and LED indications · Micro-SD card slot · Log file, System report I/O contacts (2xGP In, 4x GP Out ports) Ethernet control ports: Web GUI and SNMP					
Monitoring	Measures of MER, Shoulders, Output spectrum view, Forward and Reflected power Advanced Monitoring Tool (software option)					
Operating temperature range	0°C to 45°C					
Relative humidity (max.)	95% , non condensing					
Altitude of operation	≤ 2500 m above sea level (> 2500 m upon request)					
Cooling	Forced air					
Supply Voltage	110/230 VAC (single phase) - 47 to 63 Hz			110/230 VAC (single phase) - 47 to 63 Hz 208/400 V (three phase 4 wires) - 47 to 63 Hz		
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)					



Over **20.000** transmitters & gap-fillers
worldwide, in more than **50** countries

Spain / France / Sweden / Norway / Italy / Croatia / Greece / Hungary
Poland / Estonia / Georgia / Faeroe / Peru / Chile / Brazil / Vietnam
Hong-Kong / Singapore / Thailand / Morocco / Mali / South Africa...

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