

GAP-FILLERS / ON CHANNEL REPEATERS for SFN networks



Top class features:

- Outstanding output MER performance on very complex and multipath SFN echo conditions
- Supporting feedback echo levels above 30dB: Gain Margin (echo-signal) > 30dB
- Very low MER degradation
- Very short processing time (<5us)
- Very flexible cancellation window system (16 configurable windows)
- Gap Fillers counting with DAP
- Doppler / Rice / Rayleigh effect cancellation

Smart operation and maintenance:

- User friendly web GUI (Spectrum view, impulse response, ...)
- Advanced Monitoring Tool (short / long term histogram)



TRedess Fourth Series **ATSC 3.0 GAPFILLERS** (based on a standalone and compact architecture) include the state of the art TRedess DEEC (**Doppler Enhanced Echo Canceller**), allowing the Gap Filler / On-Channel repeater to operate in very complex echo conditions and providing an outstanding RF performance, becoming the most powerful tool in the market for the **TV BROADCASTERS** to extend their **ATSC 3.0 coverage in the most efficient and cost-effective way**.

ATSC 3.0 GAPFILLERS | Fourth Series | Technical specifications

Output power (Before filter) COFDM modulations	120 W	400 W	5 W	25 W	75 W	150 W
Final amplifier type	UWB Symmetrical Doherty		LDMOS AB class			
Frequency range	470-790 Mhz		470-862 MHz			
Dimensions	2RUx19"x480mm	3RUx19"x480mm	1RUx19"x465mm	1RUx19"x465mm	2RUx19"x480mm	2RUx19"x480mm
Standards	ATSC 3.0; A/322:2021					
RF input signal level	-70 to -20 dBm					
RF input signal frequency range	470-862 MHz					
RF input connector	N-female					
Echo canceller	Gain Margin (signal-echo): -30dB Flexible cancellation: 3 fixed windows and up to 16 user configurable windows. Echo suppression: more than 40 dB Doppler cancellation Amplitude equalization					
MER with Echo Canceller -20dB margin	> 29 dB (input MER >35 dB)					
IMD (Shoulder)	> 36 dB					
Precorrection	Digital adaptative non-linear and amplitude equalization					
RF output connector	N- female	DIN 7/16 female	N- female	N- female	N- female	N female
10 MHz reference input	BNC female 50 Ω (-15 to +10 dBm)					
10 MHz reference output	BNC female 50 Ω					
1 pps reference input	BNC female 50 Ω (TTL)					
OCXO (Option)	Stability < ±5x10exp-9 (0°C to 60°C) / Aging: < ±5x10exp-10/day / < ±5x10exp-8/year					
Local control	Front LCD display with keyboard and LED indications. Micro-SD card to save and restore configurations settings.					
Remote control	Ethernet (web application and SNMP); I/O contacts					
Operating temperature range	-5°C to 45°C					
Relative humidity (max.)	95% · Non condensing					
Altitude of operation	≤ 2500 m above sea level (> 2500m on request)					
Cooling	Force air					
Supply Voltage	110/230 VAC (single phase) - 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					



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...

TRedess
www.tredess.com