



FEATURES

- Available for leading DTV standards (DVB-T/H, DVB-T2, ATSC, ISDB-T/T_β)
- Linear and non-linear precorrections
- SFN operation
- Low power consumption
- Latest LDMOS technology
- Excellent noise figure
- “Soft-start” circuit
- AGC and ALC circuits
- Echo cancellation
- 10MHz external synchronization
- Compact design
- Remote control interface

Options:

- N+1 configuration
- GPS receiver
- Battery power supply

DESCRIPTION

The RP PLATINUM SERIES non-regenerative DTV gap filler is engineered to improve signal quality in shadow areas where geographical and physical impediments affect network coverage. The Single Frequency Network (SFN) compliant system supports most leading international DTV standards (DVB-T/H, DVB-T2, ATSC and ISDB-T/T_β). UHF and VHF bIII models are available with output power levels from 2.5W to 16W, depending on the DTV standard. The compact size makes it an ideal stand-alone solution for LPTV installations.

The gap filler receives and retransmits a digital signal over the same frequency. It exhibits a low transfer delay and enables SFN coverage to be extended efficiently. All signal processing is done digitally at an intermediate frequency level. An integrated digital echo cancellation algorithm enhances the overall system stability and performance.

The gap filler, housed in a 2HE cabinet, integrates an RF downconverter, a digital processing platform, an upconverter, AGC and ALC circuits, and a low power amplifier. Linear and non-linear precorrection circuits are incorporated to compensate for output filter and power amplifier characteristics.

STANDARD COMPLIANCE	
UHF or VHF (5 - 6 MHz)	ATSC, ISDB-T/T _β
UHF (7 - 8 MHz)	DVB-T/H, DVB-T2
Frequency range	UHF: 470 - 860 MHz VHF bIII: 170 - 240 MHz
RF input / output connector	N female, 50 Ω
RF input level	-72 dBm to -15 dBm, max. 0 dBm
Shoulder level	> 38 dB @ 4.2 MHz
Reference in	10 MHz, BNC female, 50 Ω
CONTROL INTERFACES	
Front panel	LCD display and cursor / execute keys
RS-232 serial port	9-pin SUB-D female connector
RS-485 (electrical)	9-pin SUB-D female connector (optional)
GENERAL	
Power supply	230 VAC (110 VAC optional)
Operating temperature	0 °C to +50 °C
Relative humidity	90 %, non-condensing
Cooling	Forced air with DC fans
Dimensions (W x H x D)	432 x 88 x 432 mm
Size	19" 2HE
Weight	12 - 15 Kg (depending on version)

MODEL	BAND	OUTPUT POWER		OUTPUT CONN.	POWER CONSUMPTION	
		DVB-T/H DVB-T2 ISDB-T/T _β	ATSC		DVB-T/H DVB-T2 ISDB-T/T _β	ATSC
RP-10/U-XS	UHF	2.5 W	4 W	N	85 W	90 W
RP-20/U-XS		5 W	8 W	N	135 W	140 W
RP-50/U-XS		10 W	16 W	N	180 W	190 W
RP-10/3-XS	VHF bIII	2.5 W	4 W	N	85 W	90 W
RP-50/3-XS		10 W	16 W	N	150 W	160 W

Model numbers refer to DVB-T. For other DTV standards, add the corresponding extension:

/A ATSC
/T2 DVB-T2
/IS ISDB-T

Please specify channel bandwidth:

/8 For 7 to 8 MHz
/6 For 5 to 6 MHz