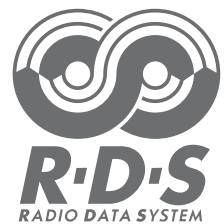


BB-FMBR1

Low Power FM Broadcast Repeater



- ▶ High quality FM receiver and low power transmitter
- ▶ PLL tuning system for both receiver and modulator
- ▶ Co-channel capability
- ▶ 1.5 Watt RF Output
- ▶ Additional MPX input for tunnel applications
- ▶ Optional integrated RDS encoder for Alarm broadcasts
- ▶ Control and monitoring via front panel LCD
- ▶ A-D convertors provide faster, more accurate metering
- ▶ Reliable and rugged professional design
- ▶ Compact 1U design

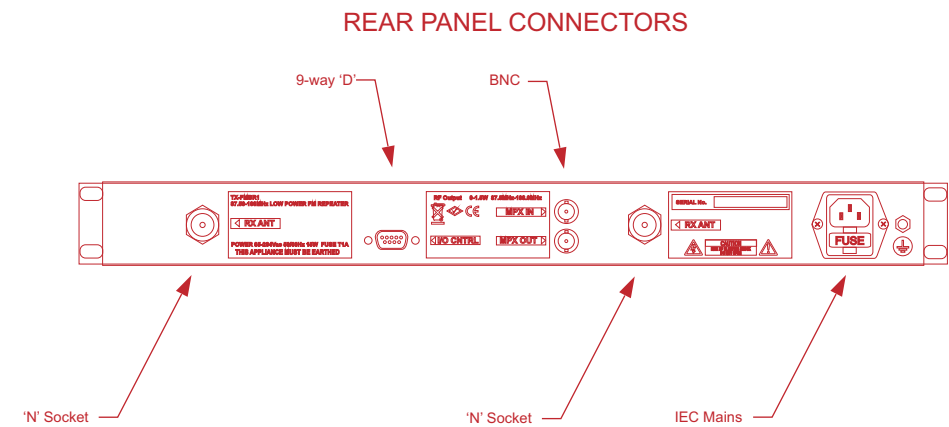
This 1.5W FM transmitter features an integral high quality FM Rebroadcast Receiver for Relay applications.

EMC compliance and professional performance are assured thanks to independent testing and approval to ETS 300 384 and ETS 300 447 (under the R&TTE Directive 1999/5/EC).

Aimed at a new generation of engineers, antiquated and slow acting needle meters have been replaced by the latest accurate analogue to digital measurement technology with menu driven LCD screens for monitoring and adjustments.

The backlit LCD display features easy to read characters for added visibility. The ergonomic front panel controls greatly simplify menu navigation and monitoring.

The integrated FM Receiver is PLL controlled and can be tuned to any frequency between 87.5 and 108.0MHz. The use of multiple local DC regulators, extensive decoupling, high level PLL phase noise filtering and extensive shielding results in excellent performance. A six stage differentially fed IF section results in



low distortion, high AM rejection and an excellent Signal to Noise Ratio.

During normal operation, the BB-FMBR1 front panel LCD displays the Forward power, Reflected power and RSSI measurements at a glance.

Should the signal from the parent station fail, the MPX programme will automatically mute until the signal is restored.

At the heart of the BB-FMBR1 is a high quality modulator which features dual varicaps for near-constant deviation levels across the entire FM band. The

carrier frequency is user-selectable via the front panel display.

SWR cut back together with a display status alarms activate in the event of mismatches in the antenna system.

The rugged BB-FMBR1 incorporates a Switch Mode Power Supply for efficiency and worldwide compatibility. Carefully specified, quality components and no cooling fans ensure continual service for many years without maintenance, making the BB-FMBR1 the obvious choice for today's quality driven, yet cost critical applications.

Specifications

Receiver input	N-Type (F) / 50 ohm
Receive / Transmit tuning range	87.50 - 108.0MHz PLL
RX sensitivity	6dBuV typical
Receive SNR	60dB typical
RF output	0.1 - 1.5W Nominal / 50ohm
Fc stability	Better than ± 200 Hz
Power supply	120 - 250V AC or DC
Size	43mm x 483mm x 280mm
Weight	3kg approx
Operating temperature	0 to 40°C / 95% RNC humidity

BB FMBR1 170609/1



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