

R-GSM Bidirectional Amplifier

EEA42LA48R

- **High RF power per carrier**
- **It compensates attenuation of the leaky cable**
- **Suitable for cascade systems**
- **Easy to install**
- **Redundant architecture for improved reliability**
- **Local and remote management**
- **Low consumption**



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Teko Telecom bidirectional amplifier is suitable for cascade systems. Cascade systems are based on Teko Telecom repeater (or head station) and bidirectional amplifiers.

The head station interfaces itself with BTS on one side, while it feeds the first part of the leaky cable on the other side. Bidirectional amplifiers extend coverage to the entire length of the shadow area.

The unit is designed to compensate the attenuation introduced by radiating/coaxial cables. Typically a bidirectional amplifier allows a repeating distance of 500m, depending on the cable used.

Bidirectional amplifiers can be powered by remote via leaky cable. Management signals are distributed on the same leaky cable. Easy installation is guaranteed thanks to power/management connections. The enclosure ensures IP65 protection degree.

Teko Telecom amplifier can be managed locally through a RS232 port or remotely via a built-in GSM/DCS modem.

Teko Telecom amplifier gives the railway operator a cost effective and reliable solution due to robust design, low power consumption and remote supervision.

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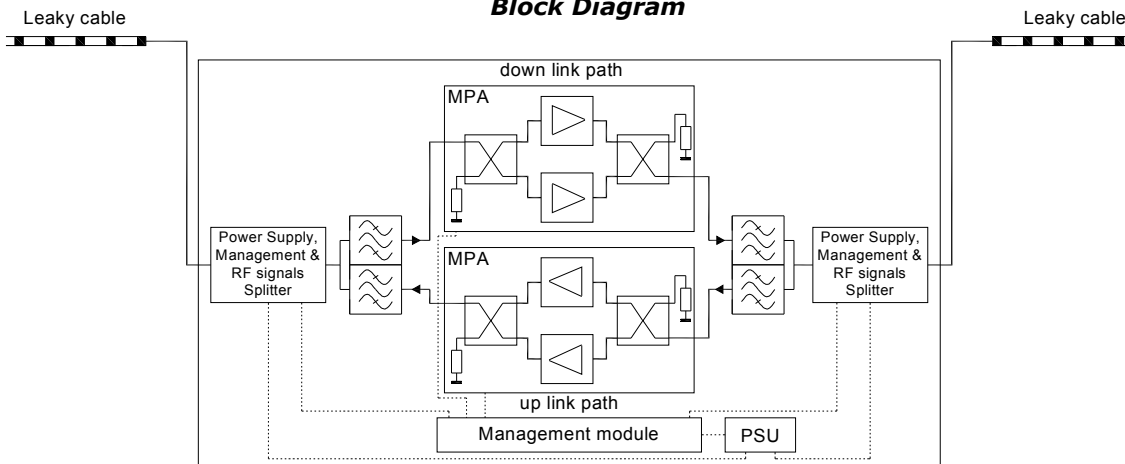
Technical Specifications

EEA42LA48R

SPECIFICATIONS	EEA42LA48R
Up Link operating frequency band	876MHz ÷ 915MHz
Down Link operating frequency band	921MHz ÷ 960MHz
Output Power	20dBm (2 carriers) (DL) 11dBm (2 carriers) (UL)
3rd Order Intercept Point (OIP3)	48dBm (Down Link)
	42dBm (Up Link)
Output Power at 1dB compression point	28dBm (Down Link)
	23dBm (Up Link)
Noise Figure	7dB
Gain / Step	5dB up to 20dB / 1dB
Return Loss	17dB
Gain stability	± 2dB (within the operating temperature range)
Spurious emissions and intermodulation products	< -36dBm (in the frequency band 9kHz ÷ 1GHz) < -30dBm (in the frequency band 1GHz ÷ 12.75GHz)
Local Control Interface	RS232
Remote Control Interface	Via leaky cable (into GSM/DCS modem built-in the head station)
Power Supply	-72 ÷ -36Vdc
Power Consumption	20W
MTBF	80 000 hours
Degree of protection provided by enclosure	IP65
Operating Temperature	-20°C up to +55°C
RF connectors	7/16 female
Dimensions (h-w-d)	403x310x230mm

All values are typical at 25°C unless otherwise specified

Block Diagram



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