

GSM-R Variable Band Selective Repeater

EEA63BV1/48R
EEA63BV1/220R

- **Adjustable bandwidth**
- **High RF power per carrier**
- **Network transparency**
- **Easy to install**
- **Local management via built-in RS232 port**
- **Remote management via PSTN or GSM modem**
- **Low consumption**



Teko Telecom GSM-R variable band selective repeater is designed to optimize cell coverage and to enhance cell signals of shadow areas.

It has been expressly developed to enhance cell coverage of GSM-R. Our cell repeater allows both the interface with donor BTS and the coverage of the shadow area by using two separate antennas, with no need of any physical interconnection with the BTS.

Its network transparency and easy installation, make shadow areas enhancements possible with very low effort. 48Vdc and 230Vac versions are available.

The enclosure ensures a protection degree IP65. The repeater can be managed locally through a RS232 port or remotely via a built-in PSTN or GSM/DCS modem.

Teko Telecom EEA63BV1 Repeater gives the railway operator a cost effective and reliable solution due to robust design, low power consumption and remote supervision.

GSM-R Variable Band Selective Repeater

Technical Specifications

EEA63BV1/48R EEA63BV1/220R

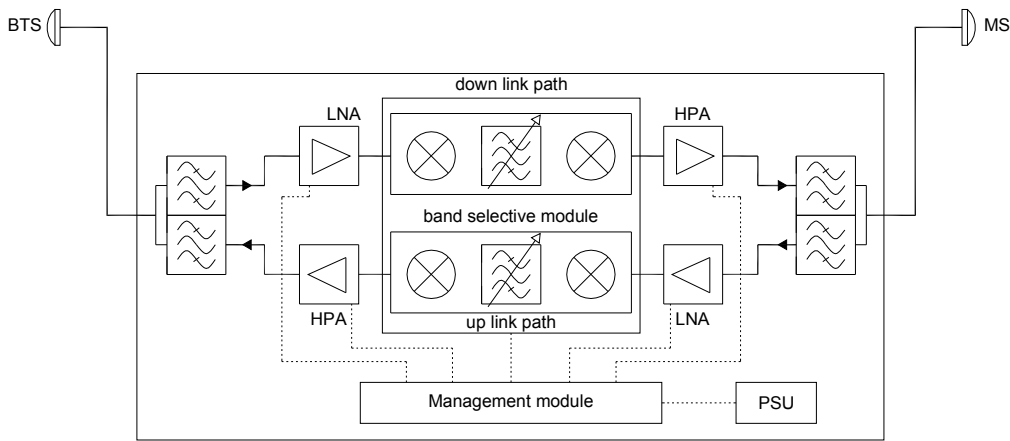
SPECIFICATIONS	EEA63BV1/48 48Vdc MODEL	EEA63BV1/220 230Vac MODEL
Up Link operating frequency band	876MHz ÷ 880MHz	
Down Link operating frequency band	921MHz ÷ 925MHz	
Number of amplified bands	1	
Bandwidth	Adjustable up to 4MHz / 10kHz step	
Output Power	27dBm (2 carriers)	
Noise Figure @ maximum gain	8dB	
Gain	50dB up to 80dB / 1dB step	
Ripple into operating band	± 2dB	
Total processing delay	6µs	
Return Loss	14dB	
ALC threshold (default value)	3dB over nominal output power (this value can be changed on site)	
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	PSTN – GSM/DCS modem	
Power Supply	-72 ÷ -36Vdc	-72 ÷ -36Vdc 85÷265Vac (50-60Hz)
Power Consumption	110W at 48Vdc	140VA at 230Vac
Operating Temperature (*)	-20°C up to +55°C	
Degree of protection provided by enclosure	IP65	
RF connectors	7/16 female	
Dimensions (h-w-d)	423x395x230mm (max volume - heat sinks included)	

All values are typical at 25°C unless otherwise specified

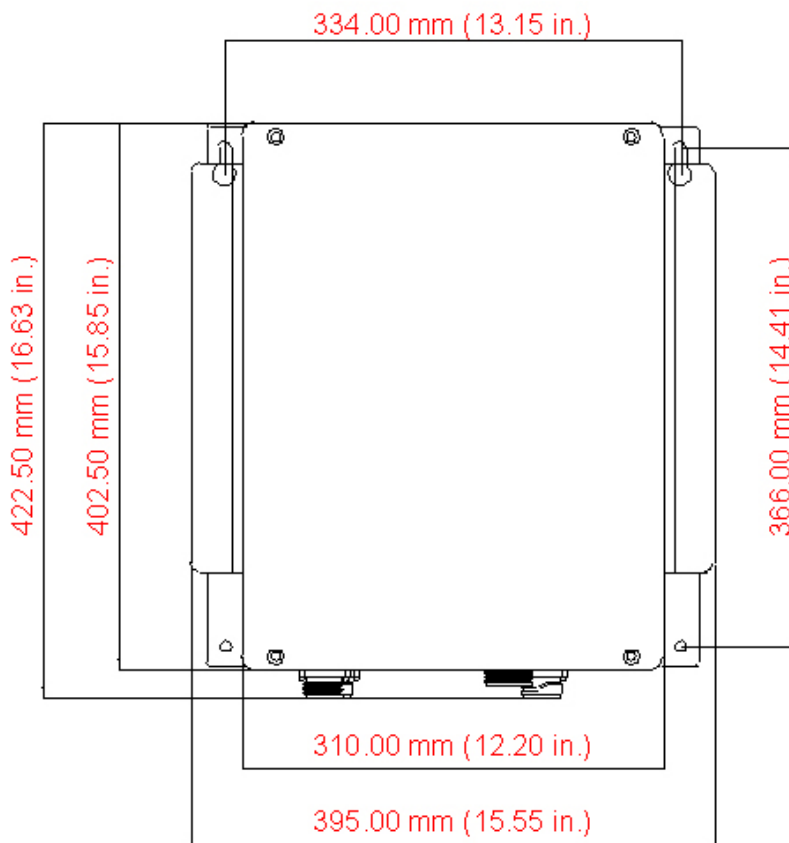
Specifications subject to change without notice

(*) Degraded performances from +50°C to +55°C

Block Diagram



Mechanical Drawing



GSM-R Variable Band Selective Repeater

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