

DCS Variable Band Selective Repeater

EEA54BV1DCS/48
EEA54BV1DCS/220

- **Adjustable bandwidth**
- **High RF power**
- **EDGE Compatible**
- **Network transparency**
- **Cost-effective BTS alternative**
- **Easy to install**
- **Local/remote management**



DCS Variable Band Selective Repeater

Teko Telecom Variable Band Selective repeater is a versatile and competitive equipment designed to optimize DCS coverage and to enhance RF signals within shadow areas.

Teko Telecom EEA54BV1DCS 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 expensive interconnection with the Operator Network.

Its network transparency and easy installation, make shadow areas enhancement possible with very low effort.

48Vdc and 230Vac versions are available.

The enclosure ensures IP65 protection degree.

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

Mobile Operators can easily empower their sole frequencies and even in case of frequency planning modification they can apply changes by remote with no need of re-tuning.

Teko Telecom Repeaters give the mobile operator a cost effective and reliable solution due to robust design, low power consumption and remote management.

DCS Variable Band Selective Repeater

Technical Specifications

EEA54BV1DCS48 EEA54BV1DCS220

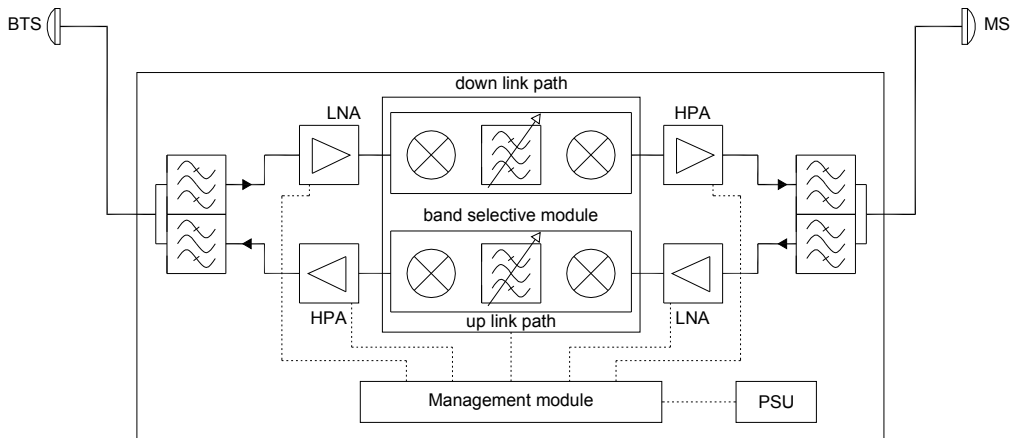
TECHNICAL SPECIFICATIONS	EEA54BV1DCS/48 48Vdc MODEL	EEA54BV1DCS/220 230Vac MODEL
Up Link operating frequency band	1710 ÷ 1785MHz	
Down Link operating frequency band	1805 ÷ 1880MHz	
Number of amplified bands	1	
Programmable Bandwidth	Up to 16.5MHz / 10kHz step	
Output Power	28dBm (2 carriers)	
3rd Order Intercept Point (OIP3)	57dBm	
Output Power at 1dB compression point	36dBm	
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

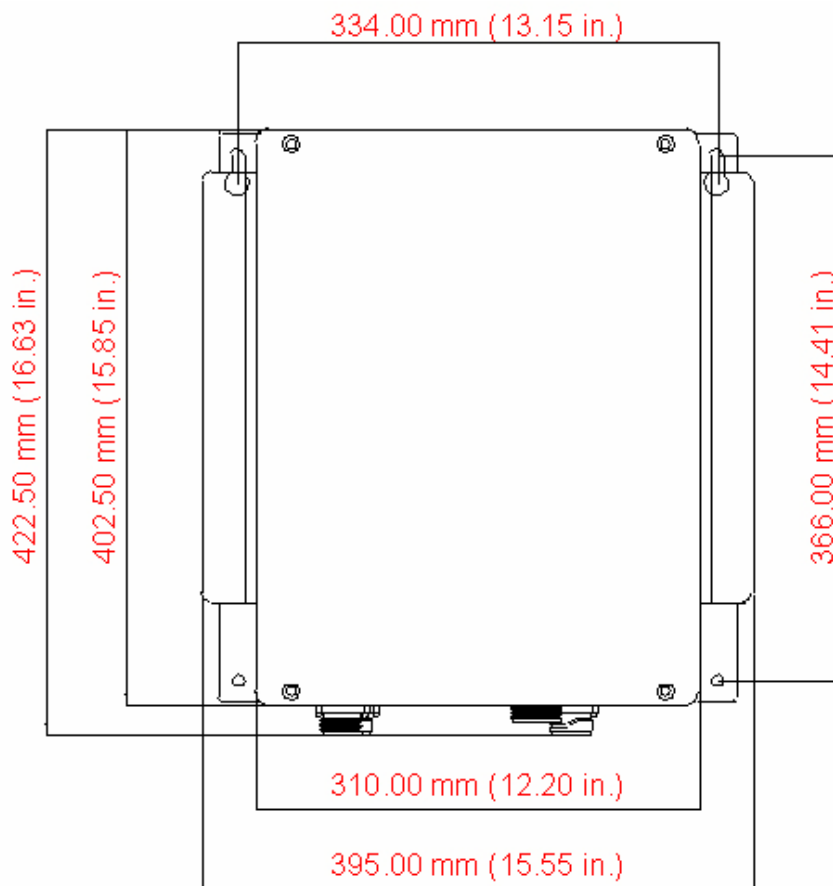
Specifications subject to change without notice

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

Block Diagram



Mechanical Drawing



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