

## UMTS Channel Selective Repeater

*EEA36CH1U48*  
*EEA36CH1U220*

- **Very high RF power**
- **3G TS 25.106 compliant**
- **HSDPA/HSUPA compatible**
- **Network transparency**
- **Easy to install**
- **Local/remote management**
- **Low consumption**



**UMTS Channel Selective Repeater**

Teko Telecom UMTS repeater has been developed to increase 3G coverage and to ensure reliable network access. It features high coverage capabilities (useful during the network roll-out) as well as high traffic capacity (as required in the following optimisation phase).

UMTS repeater easily satisfies main coverage needs:

- Node B coverage area extension
- Signal enhancement within the shadow areas
- Limit the hand-over zones

The repeater allows both the interface with donor Node B and the coverage of the shadow area by using two separate antennas, with no need of any physical interconnection with the 3G Network. Thanks to their network transparency and easy installation, Teko Telecom repeaters can be installed any time as a reliable and cheaper alternative to a new Node B implementing.

EEA36CH1U enhances one UMTS channel within the whole UMTS operator band (the channel bandwidth is fixed and the frequency center can be selected by the Operator).

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.

The wall mounting enclosure ensures a protection degree IP65.

Teko Telecom 3G repeaters are the cost-effective solution providing reliability, high performances and low consumption.

## Technical Specifications

### EEA36CH1U48 EEA36CH1U220

SPECIFICATIONS	EEA36CH1U48 48Vdc MODEL	EEA36CH1U220 230Vac MODEL
Up Link operating frequency band	1920MHz ÷ 1980MHz	
Down Link operating frequency band	2110MHz ÷ 2170MHz	
Number of channels	1	
Channel bandwidth	3.84MHz	
Gain	60dB up to 90dB / 1dB step	
Downlink maximum average output power (*)	36dBm (1 carrier)	
Uplink maximum average output power (*)	26dBm (1 carrier)	
Uplink noise figure at maximum gain	4dB	
Total processing delay	3,1µs	
Out of band gain	Conform to TS 25.106 V5.2.0	
Out of band emission	Conform to TS 25.106 V5.2.0	
Spurious emission	Conform to TS 25.106 V5.2.0	
RF Return Loss	14dB	
Pass Band Ripple	±1dB	
ALC Threshold (default value)	3dB at Nominal Output power (this value can be changed on site)	
Local Management Interface	RS232	
Remote Management Interface	GSM/DCS/UMTS modem	
Power Supply	-72 ÷ -36Vdc	-72 ÷ -36Vdc 85÷265Vac (50-60Hz)
Power Consumption	170W at 48Vdc	210VA 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)	

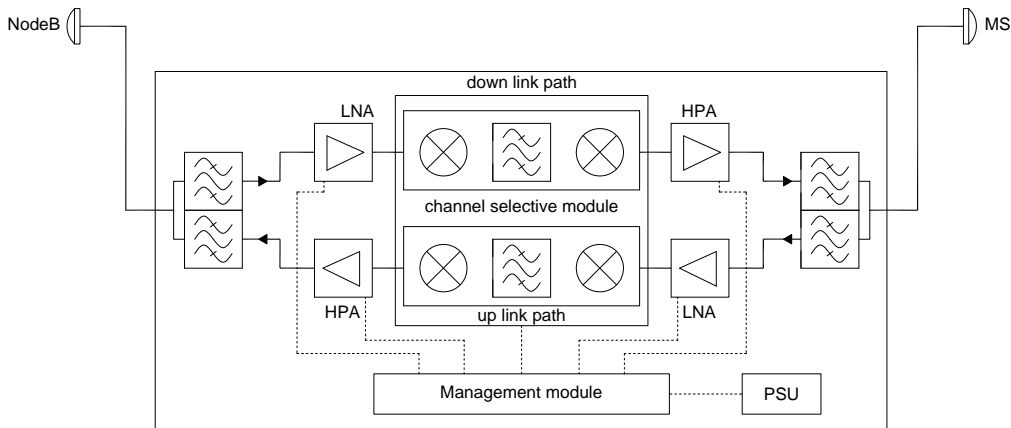
All values are typical at 25°C unless otherwise specified

Specifications subject to change without notice

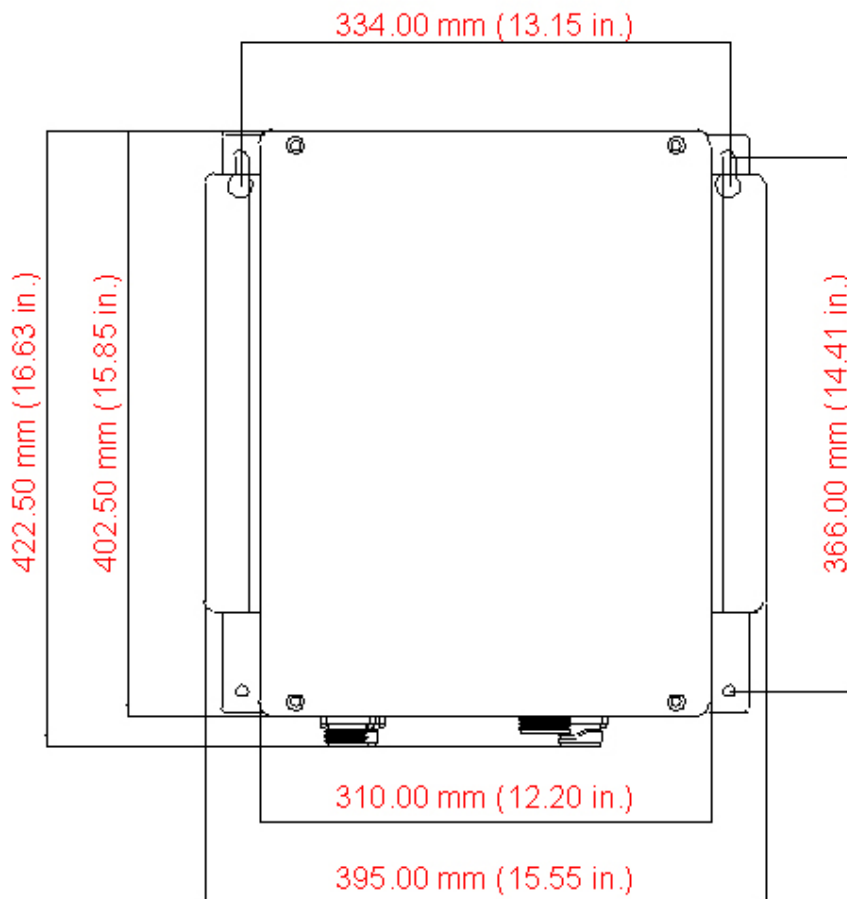
(\*) Measured with test model 1 – 64 DPCH no clipping

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

**Block Diagram**



**Mechanical Drawing**



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