

MAIN FEATURES

- ❖ Digital filter technology (SDR)
- ❖ Flexible filter selection
- ❖ Frequency shift function
- ❖ High dynamic range
- ❖ High sensitivity
- ❖ Uplink muting
- ❖ SNMP support
- ❖ Low power consumption



DESCRIPTION

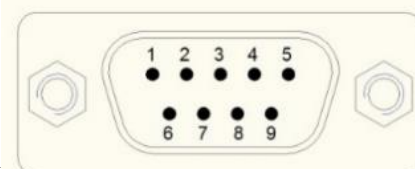
This repeater is intended to be used in 400 MHz indoor TETRA systems. Based on the latest digital filter technology this model offers freedom for the users to select the best possible filter characteristics for the actual application type. It has perfect EVM parameters of <1% and low power consumption figures.

Supplied in a compact 19" rack-mount box, this repeater is an ideal choice to be used in areas where flexible filter selection is essential for smooth operation and/or network design. It is a very economical solution which can be easily installed and can be monitored and controlled locally and remotely via the provided control software.

SPECIFICATIONS

ELECTRICAL PARAMETERS	
Frequency band	Downlink: 390 – 395 MHz Uplink: 380 – 385 MHz
Operating frequency bandwidth	5 MHz
Mode of operation	Channel (up to 8) or band selective duplex (with different filters)
Linear output power	Downlink: +36 dBm or 2 x 33 dBm (2 carriers) meets ETSI regulation Uplink: +24 dBm or 2 x 21 dBm (2 carriers) meets ETSI regulation
ICP3	Downlink: +68 dBm minimum @ 2 x 33 dBm Uplink: +51 dBm minimum @ 2 x 21 dBm
ACPR	60 dB @ linear output power
Nominal gain	90 dB
Gain setting range	90 to 60 dB adjustable in 1 dB steps
Gain ripple	<±1.5 dB typical
Gain stability	<±1.5 dB (within operating temperature range)
Uplink input noise figure	<6 dB @ maximum gain
Configurable Uplink Muting	Adjustable input signal threshold for activation
Harmonics	According to ETSI regulation
Spurious Radiation	According to ETSI regulation
Local Leakage	According to ETSI regulation
EVM	<1% typ. (ETSI regulation <10%)
Power supply voltage	230 VAC, 50 – 60 Hz
Power consumption	<110 W

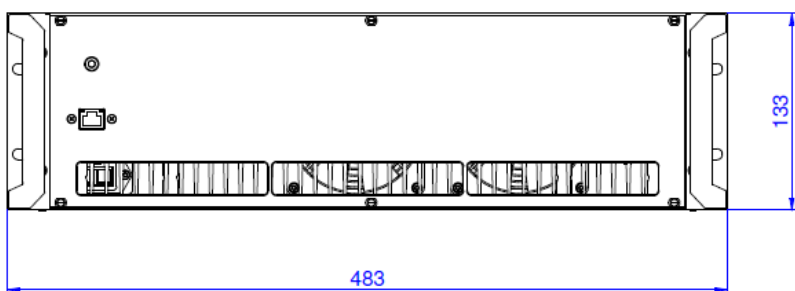
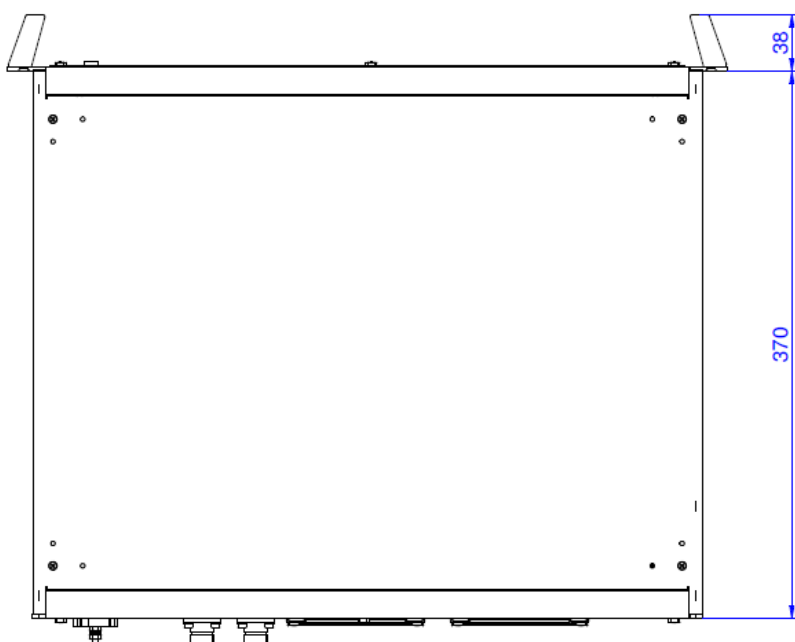
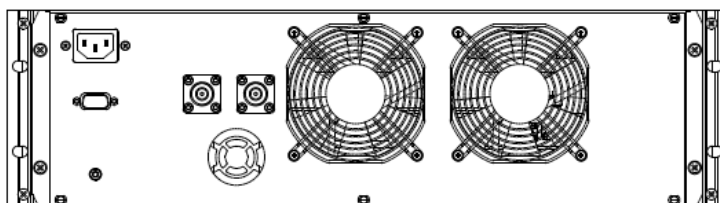
MECHANICAL PARAMETERS			
Type of power supply connector		IEC C14 male (Accessory cable IEC C13 with type F plug)	
Type of RF connectors		N – female	
Number of RF connectors		2, MOBILE, DONOR	
Weight		<22 kg	
Dimension		19" 3U (see outline dimensions)	
ENVIRONMENTAL PARAMETERS			
Operating temperature range		0 °C ... +45 °C	
Storage temperature range		-30 °C ... +70 °C	
Relative humidity		<75%, non-condensing	
Cooling		Switched forced cooling	
Degree of protection		IP20 Indoor	
SOFTWARE PARAMETERS			
Wired control		Ethernet (SNMP v1 / v2c)	
Alarm I/O		4 external alarm inputs, user configurable sum alarm output (dry contact), SNMP notifications, status LED	
Wireless control (optional)		2G / 4G modem	
EXTERNAL ALARM AND SUM ALARM CONNECTOR PINOUT (D-SUB MALE) ⁽¹⁾			
Pin no.	Function	Pin no.	Function
1	Ext. Alarm IN 1	6	Ext. Alarm COMMON
2	Ext. Alarm IN 2	7	Dry Contact
3	N.C.	8	Ext. Alarm IN 3
4	Dry Contact	9	Ext. Alarm IN 4
5	Ext. Alarm COMMON	-	-



Specifications are subject to change without notice.

(1) In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.

OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	FREQUENCY BAND
BRTL37K10924	455-460 MHz / 465-470 MHz
BRTL37K10973	410-415 MHz / 420-425 MHz

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRTL37	V01	2023-05-02