

MAIN FEATURES

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



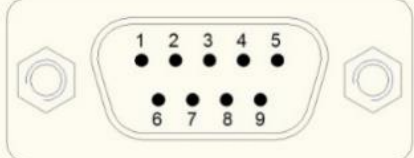
DESCRIPTION

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

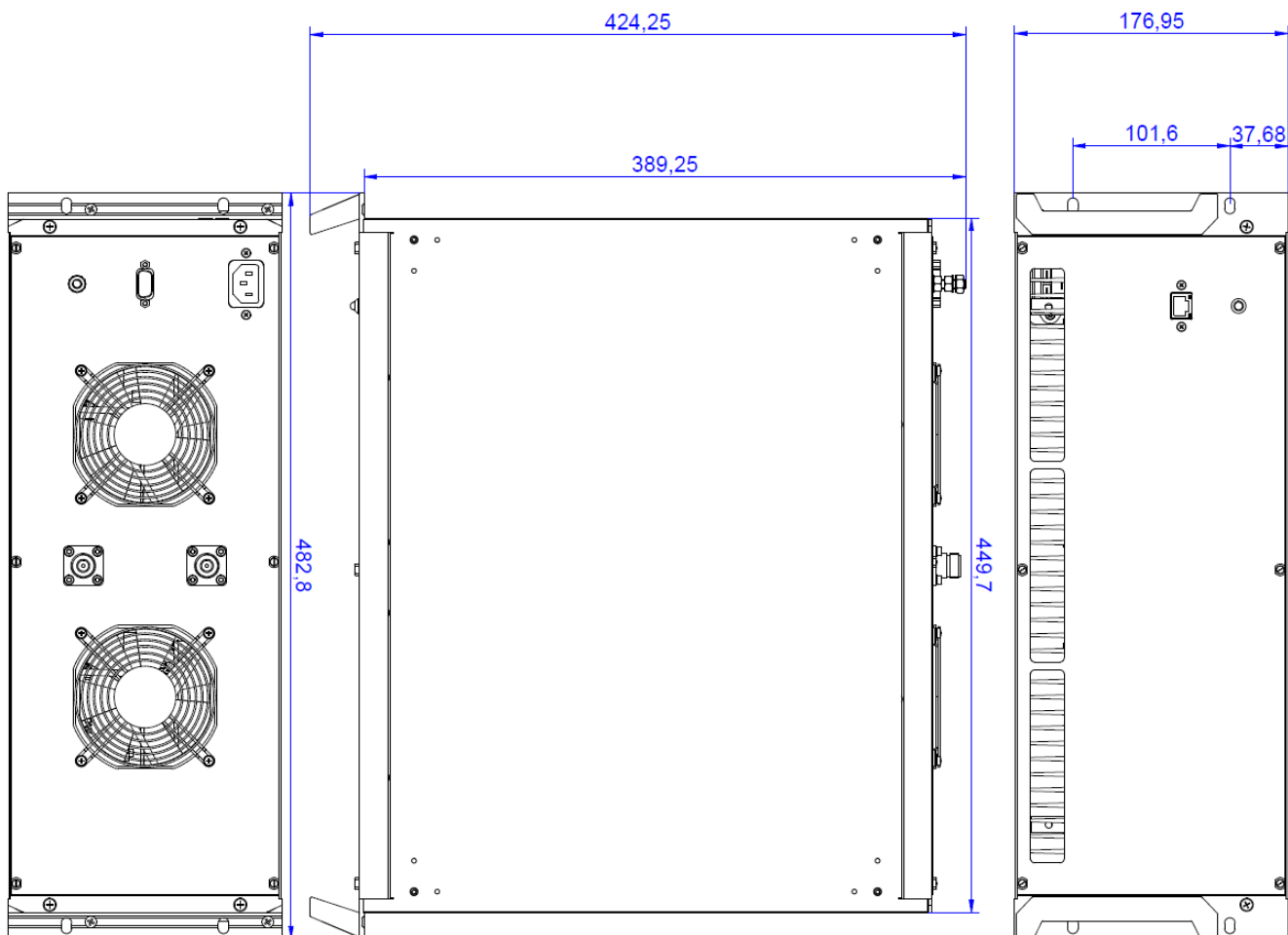
ELECTRICAL PARAMETERS	
Frequency band	Downlink: 460 – 465 MHz Uplink: 450 – 455 MHz
Operating frequency bandwidth	5 MHz
Mode of operation	Channel (up to 8) or band selective duplex (with different filters)
Linear output power	Downlink: +36 dBm or 2 x 33 dBm (2 carriers) meets ETSI regulation Uplink: +36 dBm or 2 x 33 dBm (2 carriers) meets ETSI regulation
ICP3	Downlink: +68 dBm minimum @ 2 x 33 dBm Uplink: +68 dBm minimum @ 2 x 33 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	<150 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	<24 kg			
Dimension	19" 4U (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	Not Installed			
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	DESCRIPTION
BRTL48K11138	BRTL48 36 dBm, 450-455 MHz / 460-465 MHz, G 90 dB, 230 VAC, 8CH & Uniband, Ethernet, SNMP, Combined port, 19" 4U

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRTL48-LM-K11138	V02	2023-05-02