

MAIN FEATURES

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



DESCRIPTION

This repeater is intended to be used in 400 MHz 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 wall 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

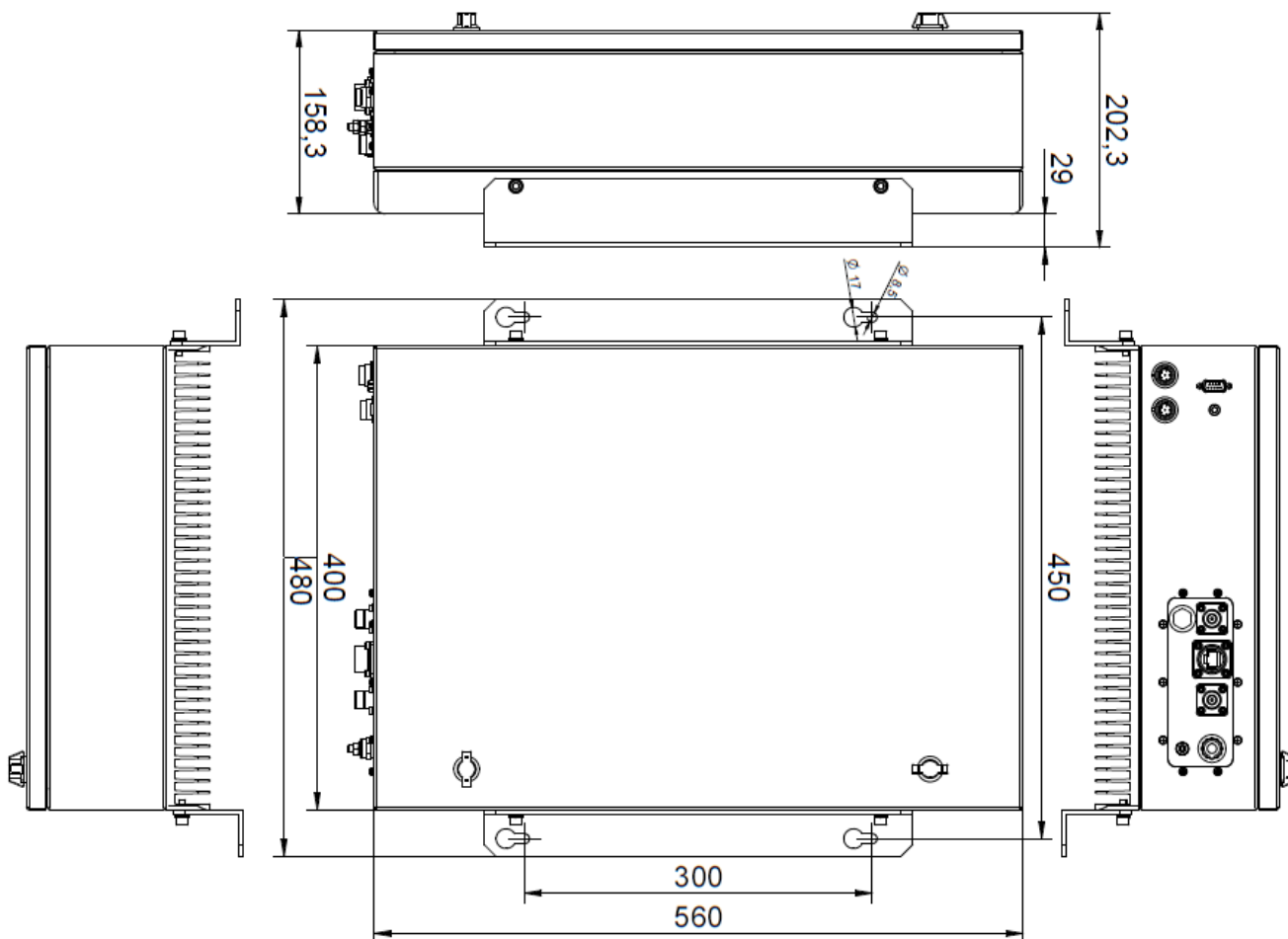
ELECTRICAL PARAMETERS	
Frequency band	Downlink: 390 – 395 MHz Uplink: 380 – 385 MHz
Operating frequency bandwidth	5 MHz
Mode of operation	Channel (up to 8) or band selective duplex (with different filters)
Linear output power	Downlink: +36 dBm or 2 x 33 dBm (2 carriers) meets ETSI regulation Uplink: +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 plug	Type F plug			
Type of RF connector(s)	N – female			
Number of RF connector(s)	2, MOBILE, DONOR			
Weight	<29 kg			
Dimension	400 x 560 x 158 mm (see outline dimensions)			
ENVIRONMENTAL PARAMETERS				
Operating temperature range	0 °C ... +45 °C			
Storage temperature range	-30 °C ... +70 °C			
Cooling	Convection and optional switched forced cooling			
Degree of protection	IP65 Outdoor			
SOFTWARE PARAMETERS				
Wired control	Ethernet (SNMP v1 / v2c), RS-232			
Alarm I/O	4 external alarm inputs, user configurable sum alarm output (dry contact), SNMP notifications, status LED			
Wireless control (optional)	2G / 4G modem			
LOCAL CONTROL (RS-232) AND SUM ALARM CONNECTOR PINOUT (D-SUB MALE) ⁽¹⁾				
Pin no.	Function	Pin no.	Function	
1	N.C.	6	N.C.	
2	RX Data	7	Dry Contact	
3	TX Data	8	N.C.	
4	Dry Contact	9	N.C.	
5	GND	-	-	
EXTERNAL ALARM CONNECTOR PINOUT (BULGIN PX0412/06S)				
Pin no.	Function			
1	External Alarm IN 2			
2	External Alarm IN 3			
3	External Alarm IN 4			
4	N.C.			
5	External Alarm IN 1			
6	External Alarm COMMON			
FAN CONNECTOR PINOUT (BULGIN PX0412/03S)				
Pin no.	Function			
E	N.C.			
L	+27 VDC (+)			
N	0 VDC (-)			

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	RF PORT	MODEM
BRTL44K10871	N – female	✓
BRTL44K11183	4.3-10 – female	✓

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRTL44	V01	2023-05-02