

MAIN FEATURES

- ❖ Extended TETRA bandwidth (6,5 MHz)
- ❖ Digital filter technology (SDR)
- ❖ Flexible filter selection
- ❖ Frequency shift function
- ❖ High sensitivity
- ❖ High dynamic range
- ❖ SNMP support
- ❖ Low power consumption



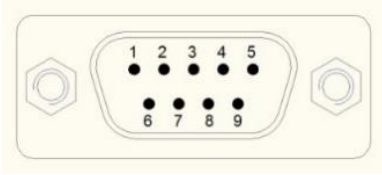
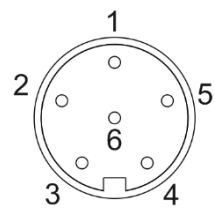
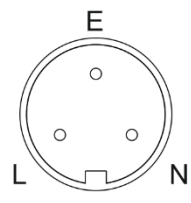
DESCRIPTION

This repeater is intended for use in 400 MHz in or outdoor 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 box, the BRTL47 is an ideal choice to be used in areas where the flexible filter selection is essential for smooth operation and/or network design. The unit can be monitored and controlled by local and remote control software.

SPECIFICATIONS

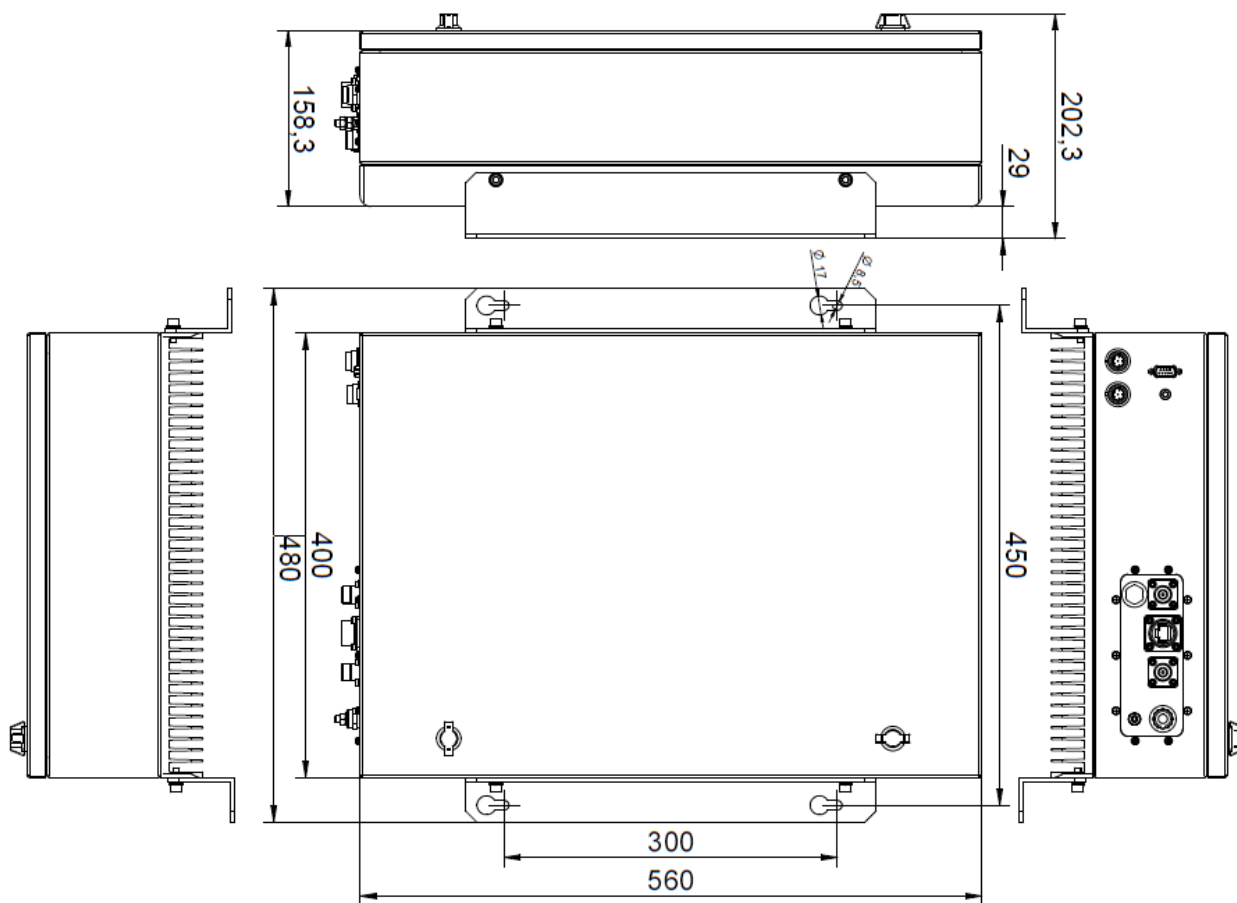
RF PARAMETERS	
Frequency band	Downlink: 390 – 396.5 MHz Uplink: 380 – 386.5 MHz
Operating frequency bandwidth	6.5 MHz
Mode of operation	Channel (up to 8) or band selective duplex (with different band filters)
Linear output power	Downlink: +36 dBm or 2 x 33 dBm (2 carriers) @ meets with ETSI Uplink: +36 dBm or 2 x 33 dBm (2 carriers) @ meets with ETSI
ICP3	Downlink: +68 dBm min. @ 2 x 33 dBm Uplink: +68 dBm min. @ 2 x 33 dBm
ACPR	60 dB @ linear output power
Nominal gain	90 dB
Gain setting range	40 – 100 dB in 1 dB steps
Gain ripple	<±1.5 dB typical
Gain stability	<±1.5 dB (within operating temp. range)
Uplink input noise figure	<6 dB @ max. gain
Harmonics	According to the ETSI regulation
Spurious radiation	According to the ETSI regulation
Local leakage	According to the ETSI regulation
EVM	<1% typ. (ETSI regulation <10%)
MECHANICAL PARAMETERS	
Type of RF connectors	N – female
Number of RF connectors	2, MOBIL & DONOR
Power supply voltage	230 VAC, 50 – 60 Hz
Power supply plug	Type F plug
Power consumption	<150 W
Weight	29 kg

Dimension	400 x 560 x 158 mm (see outline dimensions)		
Operating temperature range	0 °C ... +45 °C		
Storage temperature range	-30 °C ... +70 °C		
Cooling	Convection		
Degree of protection	IP65 Outdoor		
SOFTWARE PARAMETERS			
Wired control	Ethernet, SNMP v1 / v2c, RS-232 interface		
Alarm reporting	4 external alarm inputs, user configurable sum alarm (dry contact), SNMP error messages, SMS messages, status LED		
Wireless control	2G / 4G modem		
LOCAL CONTROL AND SUM ALARM CONNECTOR PIN OUT (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 PIN OUT (BULGIN PX0412/06S)			
Pin no.	Function		
1	External Alarm 2		
2	External Alarm 3		
3	External Alarm 4		
4	N.C.		
5	External Alarm 1		
6	Common		
			
FAN CONNECTOR PIN OUT (BULGIN PX0412/03S)			
Pin no.	Function		
E	N.C.		
L	+27 VDC (+)		
N	0 VDC (-)		
			

Specifications are subject to change without notice.

(1) In SWITCH OFF case the relay will be open. The operation of the Dry Contact relay configurable by the user.

OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BRTL47K11085	BRTL47 36 dBm, 380-386,5 MHz / 390-396,5 MHz, G 100 dB, 230 VAC, 8CH & Uniband, RS-232 & SNMP & 2G/4G Modem, 2x Combined port, wall mount, HS 40 mm

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE	REASON FOR CHANGE
BRTL47-LM-K11085	V03	09/05/2022	