

**400 MHz TETRA
DIGITAL LARGE REPEATER**

- **DIGITAL FILTER TECHNOLOGY (SDR)**
- **FLEXIBLE FILTER SELECTION**
- **FREQUENCY SHIFT FUNCTION**
- **HIGH DYNAMIC RANGE**
- **LOW POWER CONSUMPTION**
- **RS-232 AND ETHERNET CONTROL INTERFACE**
- **COMPACT SIZE**

This repeater is intended for use in 400 MHz out- and 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 box, the BRTL42 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 set locally and remotely.

Electrical characteristics

Frequency Band Uplink (*)	380 – 385 MHz
Frequency Band Downlink (*)	390 – 395 MHz
Operator Frequency Bandwidth	5 MHz
Mode of Operation	channel or band selective duplex (upto 8 ch)
Max. ALC level	36 dBm @ downlink / 33 dBm @ uplink
Linear Output Power (Uplink and Downlink)	+36 dBm downlink / +24 dBm uplink typ.
ICP3	+68 dBm @ downlink / +50 dBm @ uplink
ACPR	60 dB @ linear output power
Nominal Gain	90 dB
Gain Setting	90 to 60 dB in 1 dB steps
Gain Stability	< ± 1.5 dB (within oper. temp. range)
Uplink Input Noise Figure	4,5 dB @ max gain
EVM	< 1% typ. (ETSI regulation < 10%)
Harmonics	According to the ETSI regulation
Spurious Radiation	According to the ETSI regulation
Local Leakage	According to the ETSI regulation
RF Connectors	N – female
Supply Voltage	230 VAC / 50 - 60 Hz (optional 48 VDC)
Power Consumption	< 110 W
Weight	25 kg
Operating Temperature Range	0°C to + 40°C (optional -20°C to 55°C)
Cooling	Convection or optional fan
Wired Control / Monitoring	Local RS-232 & Ethernet with SNMP v1 / v2c / (optional) v3 protocol & Sum Alarm **
Remote Wireless Control (optional)	2G / 3G / 4G modem with automatic alarm SMS function
Application	In- or outdoor IP65
Dimension	400 x 420 x 158 mm

Specifications are subject to change without notice.

(*) available in any other standard TETRA bands too

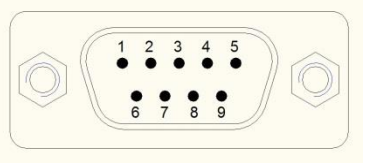
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Alarm signalling

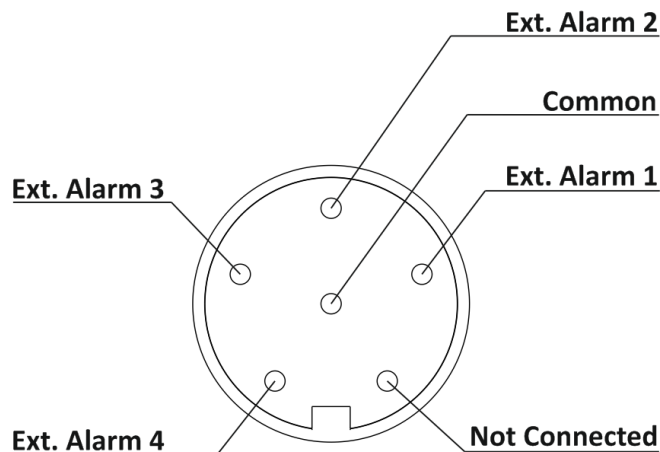
Summary alarm output	dry contact on 9 pin D-sub connector
External alarm inputs	4 independent external alarm inputs on separated connector

9 pin D-Sub male connector pin out

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		



6 pin external alarm input connector pin out

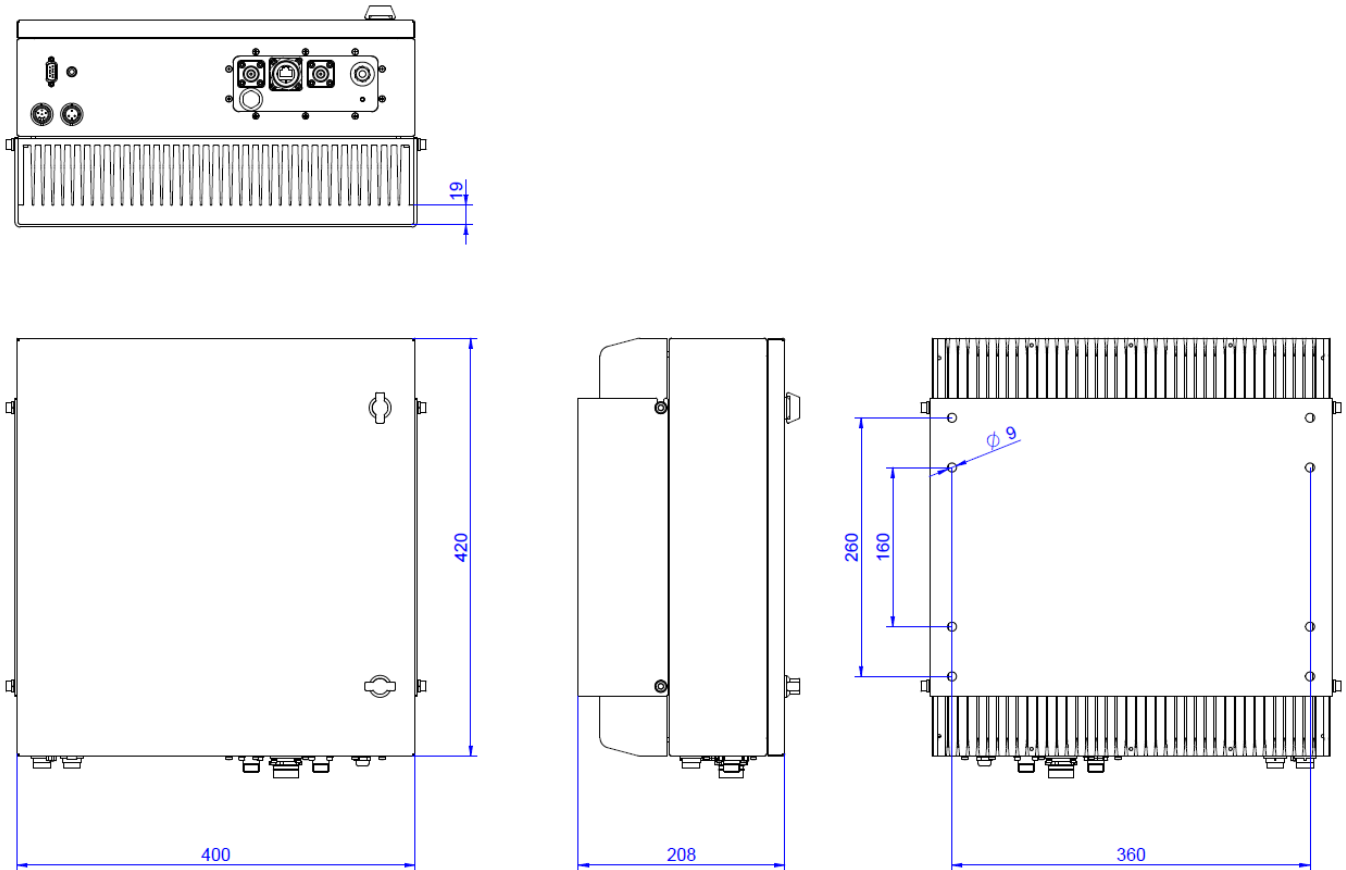




BRTL42

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Preliminary outline dimensions (mm):



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