

**400 MHz TETRA  
DIGITAL LARGE REPEATER**

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

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 BRTL44 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. It supports SNMP v1/v2c protocol by default. Support for SNMPv3 is optional.

**Electrical characteristics:**

Frequency Band Downlink	390 – 395 MHz *
Frequency Band Uplink	380 – 385 MHz *
Operator Frequency Bandwidth	5 MHz
Mode of Operation	channel or band selective duplex (upto 8 ch)
Max. ALC level	+36 dBm
Linear Output Power	+36 dBm
ICP3	+68 dBm
ACPR	60 dB @ 36 dBm
Nominal Gain	90 dB
Gain Setting	90 to 60 dB in 1 dB steps
Gain Stability	< ± 1.5 dB (within oper. temp. range)
Input Noise Figure	4,5 dB typ. @ 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 – 60Hz (optional 48 VDC)
Power Consumption	150 W
Weight	30 kg
Operating temperature range	0°C to + 40°C (optional -20°C to 55°C)
Cooling	Convection or optional fan
Wired Control	Local RS-232 and Ethernet connection + SumAlarm **
Optional: Remote Wireless Control	2G / 3G modem with automatic SMS function
Application	In- or outdoor IP65
Dimension	400 x 560 x 158 mm

Specifications are subject to change without notice.

(\*) available in any other standard TETRA bands too.

(\*\*) Sum-alarm sets configurable open or closed contact between RS-232 pin 4 and 7 in case of failure

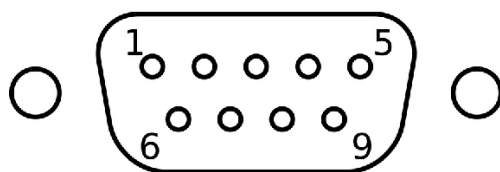
Data sheet ver 1.1 / 15 October 2020

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### Alarm signalling

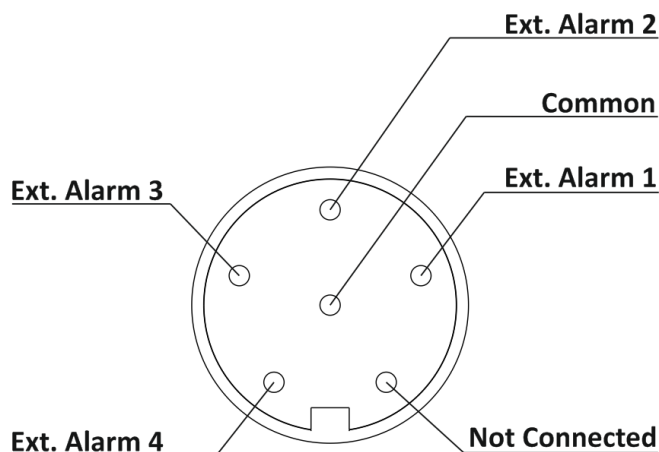
Summary alarm output	dry contact on 9 pin D-sub connector
External alarm inputs	4 independent external alarm inputs on separated connector

### 9 pin D-Sub connector pin out



PIN1: N.C.  
 PIN2: RX Data  
 PIN3: TX Data  
 PIN4: Dry Contact  
 PIN5: GND  
 PIN6: N.C.  
 PIN7: Dry Contact  
 PIN8: N.C.  
 PIN9: N.C.

### 6 pin external alarm input connector pin out

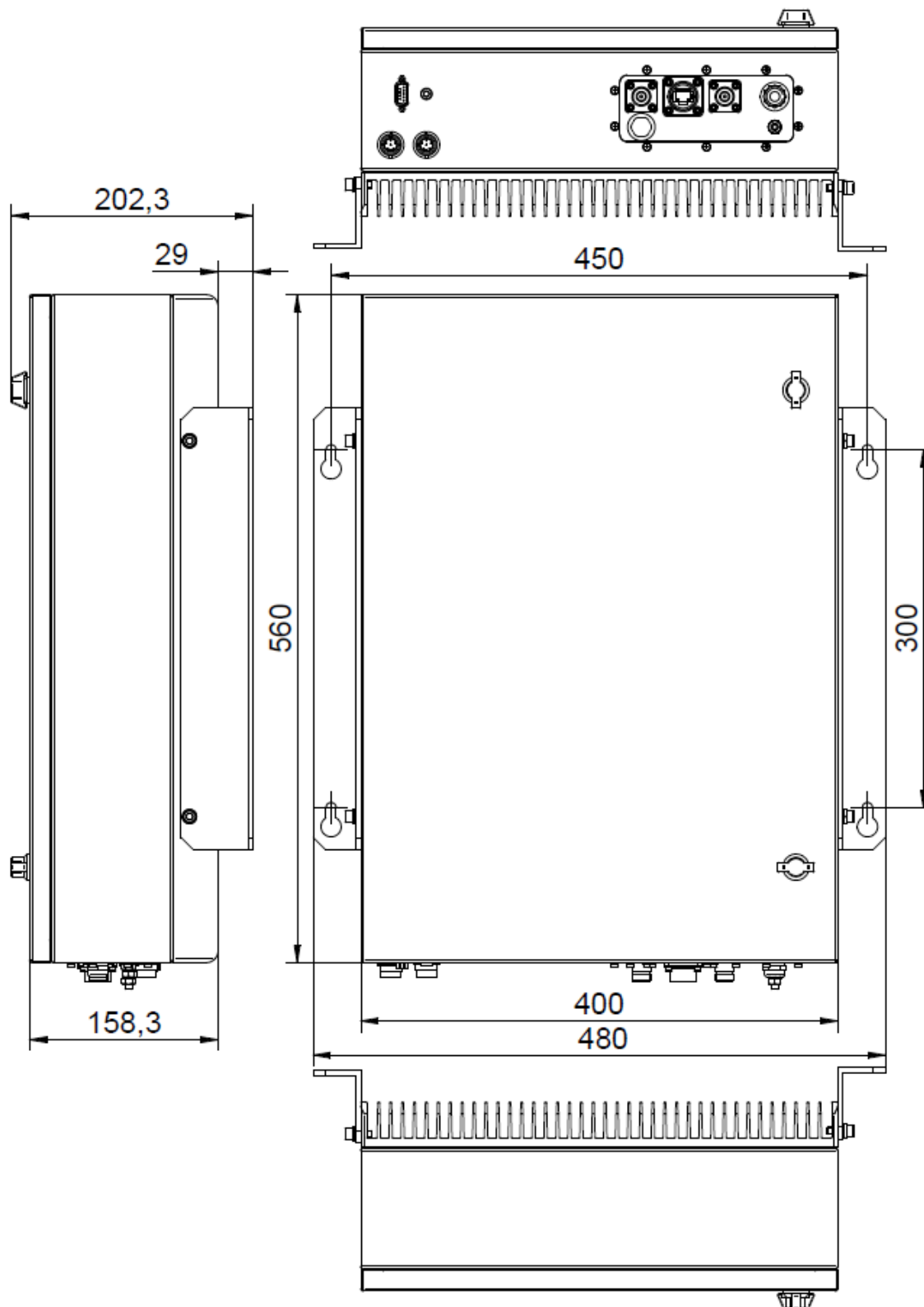




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**Outline dimensions (mm):**



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