

400 MHz Band Selective TETRA Macro Repeater

MAIN FEATURES

- * High sensitivity
- High dynamic range
- Low power consumption
- ❖ SNMP support



DESCRIPTION

This repeater is intended to be used in 400 MHz indoor TETRA systems. It is a compact and reliable unit which can be effectively used to cover areas that cannot be economically covered by base stations. 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 | | |
|--------------------------------|---|--|
| | Downlink: 380 – 385 MHz | |
| Frequency band | Uplink: 390 – 395 MHz | |
| Operating frequency bandwidth | 5 MHz | |
| Mode of operation | Band selective duplex | |
| | Downlink: +36 dBm or 2 x 33 dBm (2 carriers) meets ETSI | |
| | regulation | |
| Linear output power | Uplink: +24 dBm or 2 x 21 dBm (2 carriers) meets ETSI | |
| | regulation | |
| ICP3 | Downlink: +68 dBm minimum @ 2 x 33 dBm | |
| | Uplink: +51 dBm minimum @ 2 x 21 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 temp. range) | |
| Uplink input noise figure | <6 dB @ maximum gain | |
| 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 | <100 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 | <22 kg | |
| Dimension | 19" 3U (see outline dimensions) | |



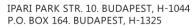




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| ENVIRONMENTAL PARAMETERS | | | | |
|--|-----------------------------|---|-------------------|-----------|
| Operating temperature range | | 0 °C +45 °C | | |
| Storage temperature range | | -30 °C +70 °C | | |
| Relative humidity | | <75%, non-condensing | | |
| 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 | Wireless control (optional) | | 2G / 4G modem | · |
| 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 | 1 2 3 4 5 |
| 2 | Ext. Alarm IN 2 | 7 | Dry Contact | |
| 3 | N.C. | 8 | Ext. Alarm IN 3 | |
| 4 | Dry Contact | 9 | Ext. Alarm IN 4 | 6 7 6 9 |
| 5 | Ext. Alarm COMMON | - | - | |

Specifications are subject to change without notice.

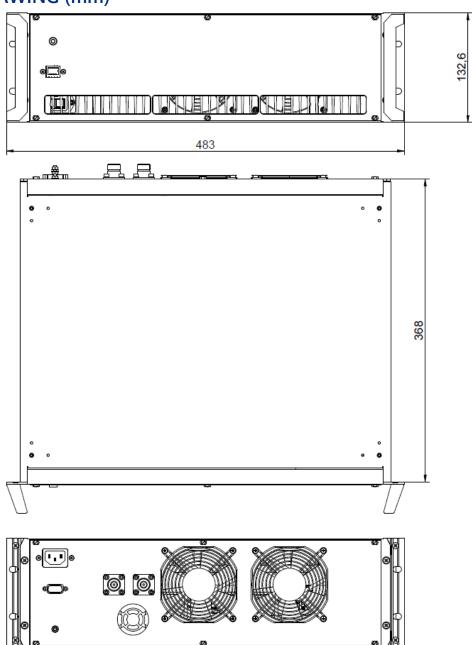


⁽¹⁾ In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.



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OUTLINE DRAWING (mm)



ORDERING INFORMATION

| MODEL NUMBER | FREQUENCY BAND | POWER SUPPLY |
|--------------|---------------------------|--------------|
| BRTL38K10146 | 380-385 MHz / 390-395 MHz | 230 VAC |
| BRTL38K10703 | 380-385 MHz / 390-395 MHz | 2 x 48 VDC |
| BRTL38K11239 | 415-420 MHz / 405-410 MHz | 230 VAC |

DOCUMENT REVISION

| DOCUMENT NAME | REVISION | DATE |
|---------------|----------|------------|
| BRTL38 | V01 | 2023-03-30 |

