

MAIN FEATURES

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



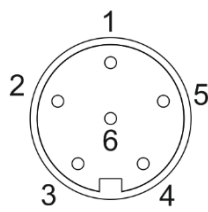
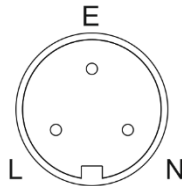
DESCRIPTION

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

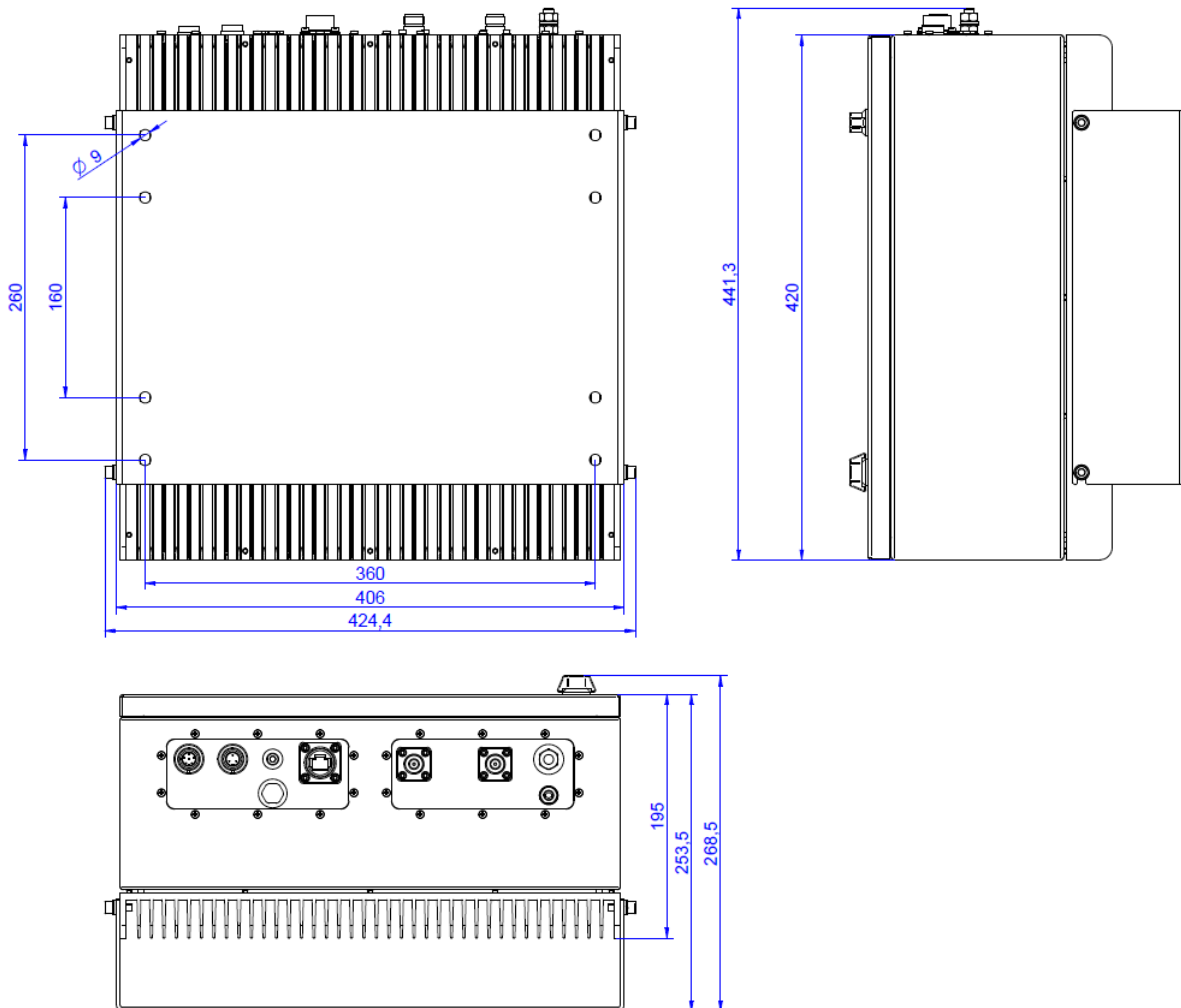
ELECTRICAL PARAMETERS	
Frequency band	Downlink: 390 – 396.5 MHz Uplink: 380 – 386.5 MHz
Operating frequency bandwidth	6.5 MHz
Mode of operation	Channel (up to 8) selective duplex
Linear output power	Downlink: +22 dBm or 2 x 19 dBm (2 carriers) meets ETSI regulation Uplink: +22 dBm or 2 x 19 dBm (2 carriers) meets ETSI regulation
ICP3	Downlink: +49 dBm minimum @ 2 x 19 dBm Uplink: +49 dBm minimum @ 2 x 19 dBm
ACPR	60 dB @ linear output power
Nominal gain	76 dB
Gain setting range	76 to 46 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	100 – 240 VAC, 50 – 60 Hz
Power consumption	<100 W

MECHANICAL PARAMETERS		
Type of power supply plug	Type F plug	
Type of RF connectors	N – female	
Number of RF connectors	2, MOBILE, DONOR	
Weight	<25 kg	
Dimension	400 x 420 x 195 mm (see outline dimensions)	
ENVIRONMENTAL PARAMETERS		
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)	
Alarm I/O	4 external alarm inputs, user configurable sum alarm output (dry contact), SNMP notifications, status LED	
Wireless control (optional)	2G / 4G modem	
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	
SUM ALARM CONNECTOR PINOUT (BULGIN PX0412/03S) ⁽¹⁾		
Pin no.	Function	
E	N.C.	
L	Dry Contact	
N	Dry Contact	

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	DL OUTPUT POWER	BAND SELECTIVE MODE	DONOR PORT	MODEM
BRTM39K10525	24 dBm	✓	Separated	
BRTM39K10998	22 dBm	✓	Combined	
BRTM39K11186	22 dBm		Combined	✓

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRTM39	V01	2023-05-02