

MAIN FEATURES

- Extended TETRA bandwidth (6,5 MHz)
- High sensitivity
- High dynamic range
- Optional uplink muting
- Compact size
- SNMP support

DESCRIPTION



This repeater is intended to be used in 400 MHz 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.

In order to reduce noise impact on the base station side, uplink muting functionality is available upon customer request.

SPECIFICATIONS

ELECTRICAL PARAMETERS			
For an an is a start	Downlink: 390.0 – 396.5 MHz		
Frequency band	Uplink: 380.0 – 386.5 MHz		
Operating frequency bandwidth	6.5 MHz		
Mode of operation	Band selective duplex		
	Downlink: +22 dBm or 2 x 19 dBm (2 carriers) meets ETSI regulation		
Linear output power	Uplink: +22 dBm or 2 x 19 dBm (2 carriers) meets ETSI regulation		
ICP3	Downlink: +49 dBm min. @ 2 x 19 dBm		
	Uplink: +49 dBm min. @ 2 x 19 dBm		
ACPR	60 dB @ linear output power		
Nominal gain	70 dB		
Gain setting range	70 to 40 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		
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%)		
Power supply voltage	230 VAC, 50 – 60 Hz		
Power consumption	<60 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	<23 kg		
Dimension	400 x 420 x 155 mm (see outline dimensions)		



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BRTM19

400 MHz Band Selective TETRA Mini Repeater

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 PINC	OUT (BULGIN PX0412/06S)				
Pin no.	Function	1			
1	External Alarm IN 2	0			
2	External Alarm IN 3	2 0 5			
3	External Alarm IN 4				
4	N.C.				
5	External Alarm IN 1	3 4			
6	External Alarm COMMON				
SUM ALARM CONNECTOR PINOUT (BULGIN PX0412/03S) ⁽¹⁾					
Pin no.	Function	E			
E	N.C.	o			
L	Dry Contact				
Ν	Dry Contact	L			

Specifications are subject to change without notice.

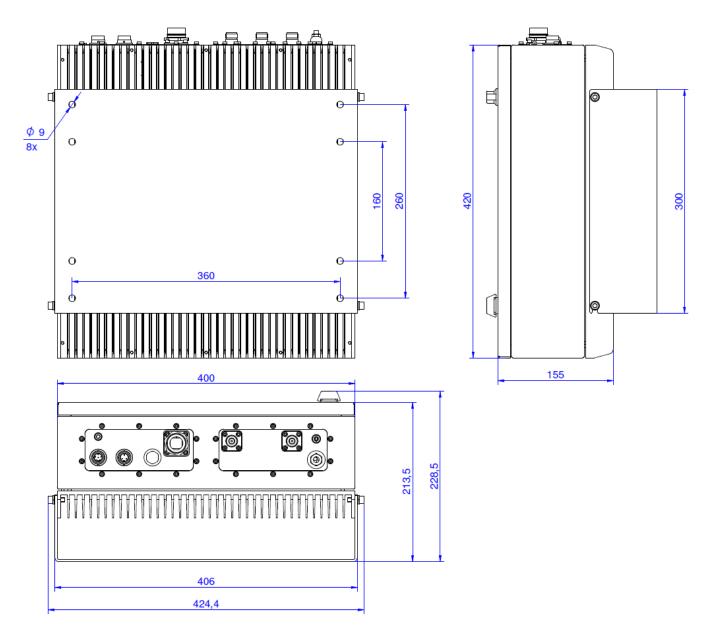
(1) In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.



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OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	DL OUTPUT POWER	GAIN	DONOR PORT	MODEM
BRTM19K10522	22 dBm	70 dB	Combined	
BRTM19K10635	20 dBm	55 dB	Separated	\checkmark

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRTM19	V01	2023-03-30



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