

#### **MAIN FEATURES**

- High sensitivity
- High dynamic range
- Low power consumption
- 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.

### **SPECIFICATIONS**

ELECTRICAL PARAMETERS		
Frequency band	Downlink: 390 – 395 MHz	
	Uplink: 380 – 385 MHz	
Operating frequency bandwidth	5 MHz	
Mode of operation	Band selective duplex	
	Downlink: +36 dBm or 2 x 33 dBm (2 carriers) meets ETSI	
Linear output power	regulation	
	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	voltage 230 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	<24 kg	
Dimensions	400 x 420 x 155 mm (see outline dimensions)	

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# BRTL43

# 400 MHz Band Selective TETRA Macro Repeater

ENVIRO	NMENTAL PARAMETERS			
Operating temperature range		0 °C +45 °C		
Storage temperature range		-30 °C +70 °C		
Cooling		Convection and optional switched forced cooling		
Degree of protection		IP65 Outdoor		
SOFTWA	RE 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	
	ARM CONNECTOR PINO	JT (D-SUB		
Pin no.	Function	Pin no.	Function	
1	N.C.	6	N.C.	
2	D.N.C.	7	Dry Contact	
3	D.N.C.	8	N.C.	
4	Dry Contact	9	N.C.	6 7 8 9
5	GND	-	-	
EXTERNA	AL ALARM CONNECTOR	PINOUT (B	ULGIN PX0412/06S)	
Pin no.		Function		
1		E	xternal Alarm IN 2	
2		E	xternal Alarm IN 3	
3		External Alarm IN 4		
	4		N.C.	6 //
5		External Alarm IN 1		3 4
6 Exter		nal Alarm COMMON	о т Т	
FAN CO	NNECTOR PINOUT (BULC	GIN PX0412	2/03S)	
Pin no.			Function	E
E			N.C.	0
L			+27 VDC (+)	
Ν			0 VDC (-)	L
Constitution	s are subject to change without	t notice		

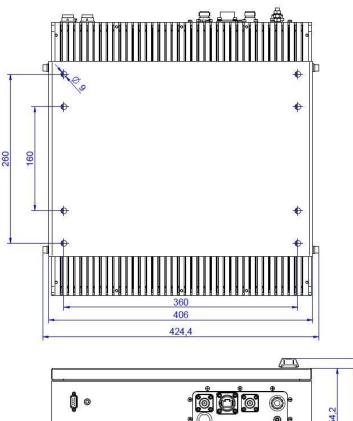
Specifications are subject to change without notice.

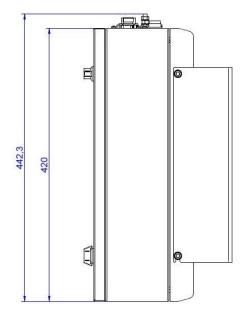
(1) In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.

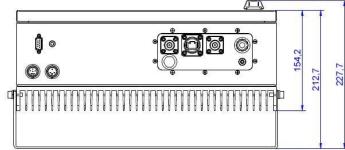




## **OUTLINE DRAWING (mm)**







### **ORDERING INFORMATION**

MODEL NUMBER	DESCRIPTION
BRTL43K11344	BRTL43, 36 dBm, 380-385 MHz / 390-395 MHz, G 90 dB, 230 VAC, Ethernet, SNMPv2c, wall mount, combined RF ports

### **DOCUMENT REVISION**

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DOCUMENT NAME	REVISION	DATE
BRTL43-LM-K11344	V01	2023-03-31

