

### **MAIN FEATURES**

- High sensitivity
- High dynamic range
- Optional uplink muting
- Low power consumption
- Compact size
- 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.

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

# **SPECIFICATIONS**

ELECTRICAL PARAMETERS			
Franciscon as based	Downlink: 390 – 395 MHz		
Frequency band	Uplink: 380 – 385 MHz		
Operating frequency bandwidth	5 MHz		
Mode of operation	Band selective duplex		
	Downlink: +18 dBm or 2 x 15 dBm (2 carriers) meets ETSI regulation		
Linear output power	Uplink: +18 dBm or 2 x 15 dBm (2 carriers) meets ETSI regulation		
ICP3	Downlink: +45 dBm minimum @ 2 x 15 dBm		
	Uplink: +45 dBm minimum @ 2 x 15 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	<±2.0 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	100 – 250 VAC, 50 – 60 Hz with external AC/DC power supply		
Power consumption	<20 W		
MECHANICAL PARAMETERS			
Type of external power supply	GST40A07-R7B; MEAN WELL		
External power supply plug	Type F plug		
Type of RF connectors	N – female		
Number of RF connectors	2, MOBILE, DONOR		
Weight	<3 kg		
Dimension	295 x 176 x 40 mm (see outline dimensions)		



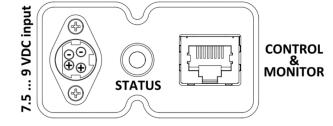
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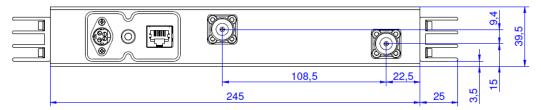
#### BRTS30/31/32 400 MHz Band Selective TETRA Pico Repeater

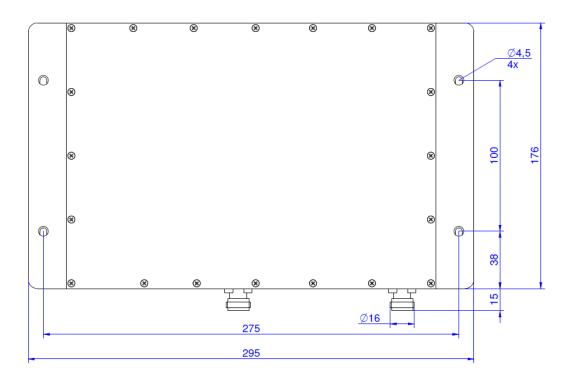
ENVIRONMENTAL PARAMETERS			
Operating temperature range	0 °C +45 °C		
Storage temperature range	-30 °C +70 °C		
Cooling	Convection		
Degree of protection	IP42 Indoor		
SOFTWARE PARAMETERS			
Wired control	Ethernet (SNMP v1 / v2c)		
Alarm I/O	SNMP notifications, status LED		
Wireless control (optional)	2G / 4G modem		
DC POWER SUPPLY, LOCAL CONTROL CONNECTOR AND STATUS LED ARRANGEMENT			



Specifications are subject to change without notice.

# **OUTLINE DRAWING (mm)**





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### **ORDERING INFORMATION**

MODEL NUMBER	FREQUENCY BAND	<b>UL-MUTING</b>	MODEM	SEPARATED MODEM PORT
BRTS30K10672	380-385 MHz / 390-395 MHz			
BRTS30K10836	455-460 MHz / 465-470 MHz			
BRTS30K10891	450-455 MHz / 460-465 MHz			
BRTS30K10981	380-385 MHz / 390-395 MHz	✓		
BRTS30K11016	415-420 MHz / 425-430 MHz			
BRTS30K11224	410-415 MHz / 420-425 MHz			
BRTS31K10674	380-385 MHz / 390-395 MHz		$\checkmark$	
BRTS31K10678	380-385 MHz / 390-395 MHz	✓	$\checkmark$	
BRTS31K10989	415-420 MHz / 425-430 MHz		✓	
BRTS31K11178	450-455 MHz / 460-465 MHz		✓	
BRTS32K10675	380-385 MHz / 390-395 MHz		✓	$\checkmark$

### **DOCUMENT REVISION**

DOCUMENT NAME	REVISION	DATE
BRTS3x	V01	2023-03-30



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