

## **400 MHz Digital TETRA Pico Repeater**

#### MAIN FEATURES

- \* Digital filter technology (SDR)
- Flexible filter selection
- Frequency shift function
- High dynamic range
- High sensitivity
- SNMP support
- Low power consumption
- Compact size
- Optional cabinet mounting kit



### **DESCRIPTION**

This repeater is intended to be used in 400 MHz indoor 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 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				
Fragues as band	Downlink: 390 – 395 MHz			
Frequency band	Uplink: 380 – 385 MHz			
Operating frequency bandwidth	5 MHz			
Mode of operation	Channel (up to 8) selective duplex (with different filters)			
	Downlink: +20 dBm or 2 x 17 dBm (2 carriers) meets ETSI			
Linear output power	regulation			
Linear output power	Uplink: +18 dBm or 2 x 15 dBm (2 carriers) meets ETSI			
	regulation			
ICP3	Downlink: +47 dBm minimum @ 2 x 17 dBm			
ICI 3	Uplink: +45 dBm minimum @ 2 x 15 dBm			
ACPR	60 dB @ linear output power			
Nominal gain	75 dB			
Gain setting range	75 to 45 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 – 250 VAC, 50 – 60 Hz with external AC/DC power supply			
Power consumption	<50 W			









# BRTS35 400 MHz Digital TETRA Pico Repeater

MECHANICAL PARAMETERS					
Type of external power supply		GST120A12-R7B; MEAN WELL			
External power supply plug		Type F plug			
Type of RF connectors		N – female			
Number of RF connectors		2, MOBILE, DONOR			
Weight		<3,5 kg			
Dimensions		240 x 163 x 84 mm (see outline dimensions)			
ENVIRONMENTAL PARAMETERS					
Operating temperature range		0 °C +45 °C			
Storage temperature range		-30 °C +70 °C			
Relative humidity		<75%, non-condensing			
Cooling			Convection		
Degree o	Degree of protection		IP40 Indoor		
SOFTWARE PARAMETERS					
Wired control		Ethernet (SNMP v1 / v2c)			
Alarma I/O		4 external alarm inputs, user configurable sum alarm output			
Alailli i/C	Alarm I/O		(dry contact), SNMP notifications, status LED		
Wireless control		Not installed			
EXTERNAL ALARMS & SUM ALARM CONNECTOR PINOUT (D-SUB MALE) (1)					
Pin no.	Function	Pin no.	Function		
1	External Alarm 1	6	Ext. Alarm Common	1 2 3 4 5	
2	External Alarm 2	7	Dry Contact		
3	N.C.	8	External Alarm 3	6 7 8 9	

External Alarm 4

Specifications are subject to change without notice.

Dry Contact Ext. Alarm Common

4

9



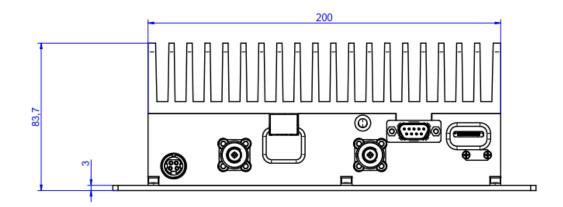


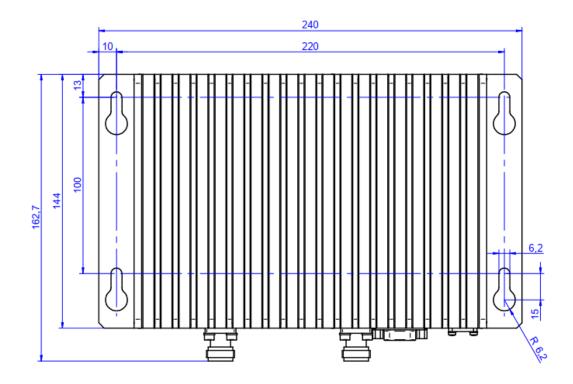


<sup>(1)</sup> In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.

# BRTS35 400 MHz Digital TETRA Pico Repeater

## **OUTLINE DRAWING (mm)**





### **ORDERING INFORMATION**

MODEL NUMBER	DESCRIPTION
BRTS35K11658	BRTS35, 20 dBm, 380 - 385 MHz / 390 - 395 MHz, G75 dB, 100 - 240 VAC external power supply, 8CH, SNMPv2c, Error log, RTC, Spectrum analyzer, 2x N-female, IP40

### **DOCUMENT REVISION**

DOCUMENT NAME	REVISION	DATE
BRTS35-LM-K11658	V01	2025-09-10





