

400 MHz Digital TETRA Macro Repeater

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



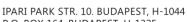
DESCRIPTION

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 19" rack-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				
Fraguency hand	Downlink: 390 – 396.5 MHz			
Frequency band	Uplink: 380 – 386.5 MHz			
Operating frequency bandwidth	6.5 MHz			
Mode of operation	Channel (up to 8) or band selective duplex (with different filters)			
Linear output power	Downlink: +36 dBm or 2 x 33 dBm (2 carriers) meets ETSI regulation			
Efficial output power	Uplink: +24 dBm or 2 x 21 dBm (2 carriers) meets ETSI regulation			
ICP3	Downlink: +68 dBm minimum @ 2 x 33 dBm			
ICF3	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 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	230 VAC, 50 – 60 Hz			
Power consumption	<110 W			





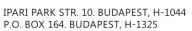


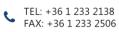


BRTL34 400 MHz Digital TETRA Macro Repeater

MECHAN	NICAL PARAMETERS					
Type of power supply connector		IEC C14 male (Accessory cable IEC C13 with type F plug)				
Type of RF connectors		N – female				
Number of RF connectors		3, Combined MOBILE, DOWNLINK INPUT, UPLINK OUTPUT				
Weight		<24 kg				
Dimension		19" 6U (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		Switched forced cooling				
Degree of protection		IP20 Indoor				
SOFTWA	SOFTWARE PARAMETERS					
Wired control		Ethernet (SNMP v1 / v2c)				
Al 1/O		4 external alarm inputs, user configurable sum alarm output				
Alarm I/O		(dry contact), SNMP notifications, status LED				
Wireless	control		Not Installed			
EXTERNAL ALARM AND SUM ALARM CONNECTOR PINOUT (D-SUB MALE) (1)						
Pin no.	Function	Pin no.	Function			
1	Ext. Alarm IN 1	6	Ext. Alarm COMMON	1 2 3 4 5		
2	Ext. Alarm IN 2	7	Dry Contact			
3	N.C.	8	Ext. Alarm IN 3			
4	Dry Contact	9	Ext. Alarm IN 4	0,09		
5	Ext. Alarm COMMON	-	-			

Specifications are subject to change without notice.





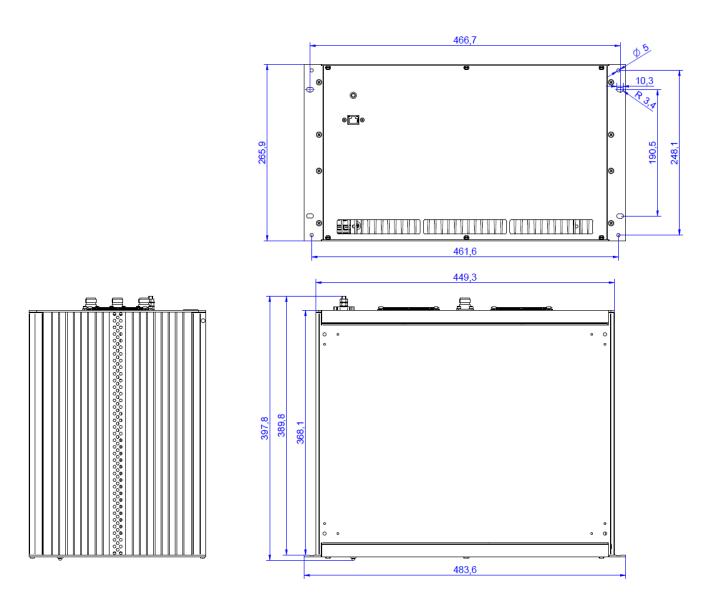


⁽¹⁾ In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.



400 MHz Digital TETRA Macro Repeater

OUTLINE DRAWING (mm)



ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION
BRTL34K11194	BRTL34 36 dBm, 380-386.5 MHz / 390-396.5 MHz, G 90 dB, 230 VAC, 8ch & Uniband, 19" 6U, SNMP, separated donor port

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRTL34-LM-K11194	V03	2023-05-02