

400 MHz Digital TETRA Mini 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



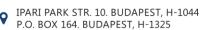
DESCRIPTION

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		
Functional	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 nouse	Downlink: +24 dBm or 2 x 21 dBm (2 carriers) meets ETSI regulation	
Linear output power	Uplink: +22 dBm or 2 x 19 dBm (2 carriers) meets ETSI regulation	
ICP3	Downlink: +51 dBm minimum @ 2 x 21 dBm	
ICP3	Uplink: +49 dBm minimum @ 2 x 19 dBm	
ACPR	60 dB @ linear output power	
Nominal gain	76 dB	
Gain setting range	76 to 46 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	<90 W	



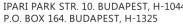




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MECHAN	IICAL PARAMETERS					
Type of power supply connector		IEC C14 male (Accessory cable IEC C13 with type F plug)				
Type of RF connectors		N – female				
Number of RF connectors		3, Combined MOBILE, DOWNLINK INPUT, UPLINK OUTPUT				
Weight		<25 kg				
Dimension		19" 4U (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 o	Degree of protection		IP20 Indoor			
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	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	6 7 8 9		
5	Ext. Alarm COMMON	-	-			
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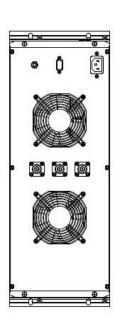


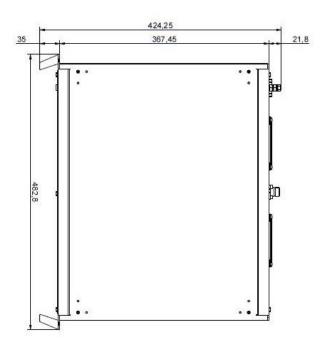
⁽¹⁾ In POWERED OFF state the relay will be open. The operation of the Dry Contact relay is configurable by the user.

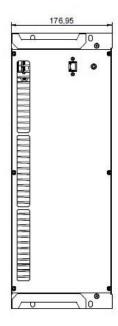


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OUTLINE DRAWING (mm)







ORDERING INFORMATION

MODEL NUMBER	DESCRIPTION	
BRTM48K10885	BRTM48 24 dBm, 380-386,5 MHz / 390-396,5 MHz, 8CH + Fix 6,5 MHz BS	
	mode, G 76dB, 230 VAC, 19" 4U, Separated Donor port, SNMP	

DOCUMENT REVISION

DOCUMENT NAME	REVISION	DATE
BRTM48-LM-K10885	V01	2023-05-02