

**400 MHz TETRA
DIGITAL MEDIUM REPEATER**

- **DIGITAL FILTER TECHNOLOGY (SDR)**
- **FLEXIBLE FILTER SELECTION**
- **FREQUENCY SHIFT FUNCTION**
- **HIGH DYNAMIC RANGE**
- **LOW POWER CONSUMPTION**
- **SEPARATED DONOR PORT**

This repeater is intended for use in 400 MHz out- and 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 19" rack, the BRTM34 is an ideal choice to be used in areas where the flexible filter selection is essential for smooth operation and/or network design. The unit can be monitored and set by local and remote control software.

Electrical characteristics:

Frequency Band Downlink	390 – 395 MHz ⁽¹⁾
Frequency Band Uplink	380 – 385 MHz ⁽¹⁾
Operator Frequency Bandwidth	5 MHz
Mode of Operation	channel or band selective duplex (upto 8 ch)
Max. ALC level	30 dBm @ downlink / 27 dBm @ uplink
Linear Output Power (Uplink and Downlink)	+24 dBm downlink / +22 dBm uplink typ.
ICP3	+51 dBm @ downlink / +49 dBm @ uplink
ACPR	60 dB @ 24 dBm downlink and 22 dBm uplink
Nominal Gain	76 dB
Gain Setting	76 to 46 dB in 1 dB steps
Gain Stability	< ± 1.5 dB (within oper. temp. range)
Input Noise Figure	5 dB typ. @ max gain
EVM	< 1% typ. (ETSI regulation < 10%)
Harmonics	According to the ETSI regulation
Spurious Radiation	According to the ETSI regulation
Local Leakage	According to the ETSI regulation
RF Connectors	N – female
Supply Voltage	100 - 240V / 50 – 60Hz AC (optional 48V DC)
Power Consumption	< 80 W
Weight	20 kg
Operating temperature range	0°C to +40°C
Cooling	Forced air
Wired Control	Local RS-232 + Sum alarm (dry contact) ⁽²⁾ or optional Ethernet connection
External alarm input	4 inputs, 9 pin D-Sub female connector
Remote Wireless Control	Dial Up GSM modem and automatic SMS function
Application	Indoor
Dimension	19" wide, 3 U height, 374 mm depth

Specifications are subject to change without notice.

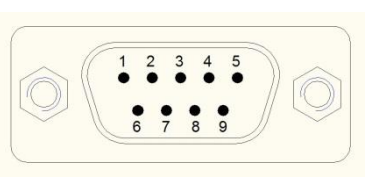
¹Other TETRA bands are also available.

²Sum-alarm sets open contact between RS-232 pin 4 and 7, event information can be found in Sum Alarm events table on next page.

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Local control connector pin map (9 pin D-Sub male) on front panel

Pin no.	Function	Pin no	Function
1	N.C.	6	N.C.
2	RX Data	7	Dry Contact
3	TX Data	8	N.C.
4	Dry Contact	9	N.C.
5	GND	-	-




Sum Alarm events on dry contact connectors

Status	DSUB-M PIN 4 and 7
Overheating	Open
PLL lock error	Open
RF overdrive	Open
DL Power Alarm	Open
Switched off	Open

External alarm connector and fan pin map (9 pin D-Sub female) on rear panel

Pin no.	Function	Pin no	Function
1	GND.	6	External alarm IN 3
2	N.C	7	External alarm IN 1
3	N.C.	8	N.C.
4	External alarm IN 2	9	GND
5	External alarm IN 0	-	-





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Outline dimensions (mm):

