

**TETRA OPTICAL
MACRO SLAVE REPEATER**

- **4W MAX ALC RF OUTPUT POWER**
- **HIGH SENSITIVITY**
- **HIGH DYNAMIC RANGE**
- **19" RACK MOUNTED**

This repeater is intended to use for TETRA in or outdoor optical fibre systems. It is a compact and reliable unit, and it is especially advantageous to use it in areas where off air transmission is not preferable (like tunnels, large buildings etc.). The base station side optical master unit can communicate through optical fiber with slave unit on repeater side, which provides high flexibility in system build-up. This very economical solution can be installed easily, and the repeater can be set and monitored using the bundled remote control software.

Electrical characteristics:

Optical Repeater Technical Parameters	
Parameters	Remote Site Slave Repeater
Frequency Band Uplink	415-420 MHz *
Frequency Band Downlink	425-430 MHz *
Nominal Gain	85dB
Gain Setting	60 to 85 dB adjustable in 1dB step
ICP3 Downlink	> 68 dBm typ.
Linear Output Power	+36 dBm ** @ -36dBm IM
Max. ALC Level	+36 dBm **
Uplink Path Noise Figure	< 5 dB typ @ max. gain
ALC response	3msec max.
ALC range	40 dB
Group delay	2usec max.
Optical Module Maximum RF Input Power	+5 dBm
Optical Connectors	FC/APC optional LC/PC
RF Connector	N-female
Power Supply	100-240 VAC 50-60 Hz***
Power Consumption	< 120 W
Weight	18 kg
Size	3U height 19"
Operating Temperature Range	0°C to +45°C
Storage Temperature Range	-30°C to +70°C
Sum alarm	Dry contact – detailed operation see below
Local Control	RS232
Remote Control	Through optical fiber with master unit
Cooling fan	Yes (with temperature sensor)
Degree of Protection	Indoor

(*) Other TETRA bands are also possible.

(**) According to the customer request other downlink RF power level version also possible.

(***) Optional 48V DC power supply version is possible.

Specifications are subject to change without notice.

TETRA OPTICAL MACRO SLAVE REPEATER

Dry contact switching

Status	D-Sub male pin 4 and 7
Overheating	OPEN
Uplink SAW Current failure	
PAM Current failure	
+12V Supply Voltage failure	
LD or PD Alarm	
Switched off	
RF overdrive*	

(*) After 30 minutes of continuous RF overdrive status.

Any other case: close contact between pin 4 and 7.

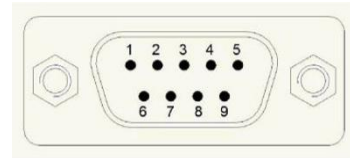


fig.1.

Local Control Pinout (according to fig. 1.)					
Pin no.	2	3	4	5	7
Function	Serial Rx/D	Serial Tx/D	Dry Contact	GND	Dry Contact

The remaining RS232 standard input pins are not connected.

Outline drawing:

