

## TETRA OPTICAL MASTER REPEATER

- SUPORT OF ONE SLAVE
- REMOTE SUPERVISION OF SLAVE UNIT
- WDM TECHNOLOGY (Optical Wavelength Division Multiplexer)
- AUTOMATIC OPTICAL POWER CONTROL
- SUPPORTS BOTH MEDIUM & MACRO SLAVES

This TETRA master repeater is intended for use to convert signals from RF to optical and supply the remote optical slave repeaters. Typical applications are: long tunnel sections, in-building systems, large area outdoor coverage and long distance feed areas where the cost of the traditional RF cable is more expensive than the economical optical fiber solutions.

Using WDM (Wavelength Division Multiplex) technology the uplink and downlink signals are going on he same optical cable. The same optical cable is used for the remote supervision and alarm handling functions, which results a reliable control of communication link. The connected slave (including its optional external alarms) and the master unit can controlled through the master unit with a direct connection or by the help of one GSM modem. The uplink and downlink gain can be set individually.

## **Electrical characteristics:**

Optical Repeater Technical Parameters	
Parameters	Base Station Site Master REPEATER
Frequency Band Uplink	380 – 385 MHz *
Frequency Band Downlink	390 – 395 MHz *
Nominal Gain	-10 dB (optional 30 dB internal coupler)
Gain Setting	-40 to -10 dB adjustable in 1 dB step
Pass Band Ripple	$<\pm1,5$ dB max.
Gain Stability	$< \pm 1$ dB (within operating temp. range)
Optical Module Maximum RF Input Power	+5 dBm
Optical loss between master and slave	typ. 10 dB, max. 12 dB
Optical Connectors	FC/APC
RF Connectors	N-female
Power Supply	100 - 240 VAC / 50 - 60 Hz, optional DC 48 V
Power Consumption	10 W
Weight	3 kg
Size	standard 19", 1U, 400mm
Operating Temperature Range	0°C to +45°C (optional -25°C to +55°C **)
Storage Temperature Range	-30°C to +70°C
Local Control	TCP/IP or RS232
Remote Control	GSM modem with SMS function
Alarm out	SMS & Optional dry relay contact
Degree of Protection	Indoor

<sup>(\*)</sup> Other TETRA, VHF bands are also possible.

Specifications are subject to change without notice.







<sup>(\*\*)</sup> with extra fan.



## TETRA OPTICAL MASTER REPEATER

## **Outline dimensions (mm):**











