



MOB-100

Optical Receiver

User Manual

General principles of use

Prior to installation, adjustments and using the device, you should refer to the User Manual to facilitate the correct configuration and avoid any damage.

TELKOM-TELMOR endeavours to provide you with a device that is fully operational. If, however, the device becomes damaged in transport for any reason beyond the Manufacturer's control, you need to notify the Manufacturer or their sales representative of this fact and agree on how to repair the defect.

The MOB-100 may be stored for 18 months from the date of manufacture without any deterioration of its performance. Standard storage atmospheric conditions are in accordance with the environmental specifications of IEC 68.1: temperature $15 \div 35^{\circ}\text{C}$, humidity $25 \div 70\%$, pressure $860 \div 1060\text{hPa}$.

Characteristics

The MOB-100 is a modern optical micro receiver dedicated for use in FTTH (Fiber To The Home) applications. A metal cast enclosure of the device enables its installation within a "mouse" type plastic casing. At its input the receiver has an SC/APC connector while its RF output is fitted with a F-type connector. The optical receiver is fitted with a three-state LED optical power indicator.

Use

The MOB-100 is dedicated for FTTH applications. It is installed at the end subscriber's location, further past the point where the signal is distributed for downstreaming to several TV receivers. A built-in AGC enables the output signal to remain at a constant level despite variations in input signal strength.

Connection method

Apply an optical signal ranging $-10 \dots -3$ dBm to the SC/APC connector and connect a TV receiver to the RF output. Next turn the power supply on.

A three-state LED indicator measures input signal strength:

- orange $P_{IN} < -10\text{dBm}$,
- green $-10\text{dBm} < P_{IN} < -3\text{dBm}$,
- red $P_{IN} > -3\text{dBm}$.

Safe operation principles:

- To ensure appropriate ventilation, keep any items at least 5 cm away from the unit.
- Don't cover the unit with items such as newspapers, tablecloths, curtains, etc..
- Do not place any sources of open flame (such as burning candles) or strong heat near the unit.
- Do not put any containers with fluid on top of or near the unit.

Technical parameters

OPTICAL PATH		MOB-100
Input power range (P_{IN})	dBm	-10...-3,0
Wavelength range	nm	1280 – 1600
Maximum power	dBm	+3
Input signal strength indicator	dBm	Three-colour LED: - orange: $P_{IN} < -10$ - green: $-10 < P_{IN} < -3$ - red: $P_{IN} > -3$
Input connector	/	SC / APC
RF path		
Frequency range	MHz	47-862
Gain flatness	dB	$\pm 1,0$
AGC accuracy within the -10...-3dBm range	dB	± 1
C/N for input power = -3dBm and OMI =3,5%	dB	52
Maximum output level (42 CENELEC channels) - CTB, CSO ≤ 60 dBc	dB μ V	80
Output connector	/	"F" socket
Input impedance	Ohm	75
OTHER		
Supply voltage (external power supply)	V_{DC} / mA	9 / 150
Power consumption	W	< 1,0
Working temperature range	$^{\circ}$ C	0...+40



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