

FTTH Fiber Termination with optical receiver LR10, LR10W and LR10 0100



WISI LR10

The LR10 FTTH fiber termination provides an integrated optical receiver for CATV and SAT-TV frequencies.

It's enclosed in a wall-mount in-home housing, which incorporates both the splice and fiber tray and the o-e-converter for the RF signals.

The automatic level control and two RF output levels make the RF reception easiest possible.

LR10 W provides an integrated WDM filter for RF overlay on GPON infrastructure.

LR10 0100 offers a passive termination of a second fiber for future FTTH upgrade.



In-home fiber termination with
integrated optical receiver

Features

- WALL-MOUNTED FTTH NETWORK TERMINATION FOR DWELLING INSTALLATION
- OPTICAL RECEIVER FOR DISTRIBUTION OF CATV AND SAT
- LR10W: HIGH-ISOLATION PON PASS-THROUGH PORT FOR RF-OVERLAY IN SINGLE-FIBER FTTH NETWORKS
- LR10 0100: TERMINATION OF AN ADDITIONAL FIBER FOR „OPEN ACCESS“-NETWORKS
- AUTOMATIC OUTPUT LEVEL CONTROL (ALC)
- DC POWERED VIA RF OUTPUT
- LED FOR DISPLAYING OPTICAL INPUT POWER
- OPTIONAL: PROTECTION LID FOR PATCHCORD CONNECTORS

FTTH Fiber Termination with optical receiver LR10, LR10W and LR10 0100



Technical information

Optical-electrical converter

Wavelength	1260 ... 1630 nm (LR10W: 1540 ... 1630 nm)
Optical input level	-7 ... +1 dBm
Frequency range	47 ... 2400 MHz
RF outputs	2 pcs.
Output level 1	75 dB μ V (ALC, PAL channel at 4 % OMI)
Output level 2	65 dB μ V (ALC, PAL channel at 4 % OMI)
CSO	> 60 dB (CENELEC 42 ch.)
CTB	> 60 dB (CENELEC 42 ch.)
Frequency response	-2 ... +2 dB
Noise current density	< 6 pA/ \sqrt Hz

PON-WDM (LR 10 W only)

PON wavelengths	1260 ... 1360 & 1480 ... 1500 nm
PON insertion loss	< 1 dB
Isolation COM \rightarrow RF-Downstream	> 35 dB
Isolation COM \rightarrow PON	> 15 dB (1540 ... 1630 nm)
Isolation PON \rightarrow RF-Downstream	> 50 dB

Connectors

Splice tray	For crimped and heat-shrunked splice protectors
Pigtail fiber type	Single mode fiber 9/125 μ m
F-sockets	2 pcs. (2x RF output, each with DC input)
RF impedance	75 Ω
Return loss	> 16 dB
SC/APC socket	LR10W 1 pc. (PON) LR10 0100 1 pc. (Passive fiber termination)
Optical return loss	> 40 dB

General data

Operating voltage	9 ... 20 V DC
Power consumption	< 3 W
Operating temperature range	+5 ... +40 $^{\circ}$ C (ETSI EN 300019-1-3 class 3.1)
Case dimensions (without protection lid)	88 x 88 x 38 mm ³

LR10

FTTH network termination with optical receiver



WISI LR10

FTTH network termination with optical receiver and PON-WDM



WISI LR10

FTTH network termination with optical receiver and additional fiber



LRPS 0230 Wall-plugged power supply unit for feeding unit for feeding the LR10 from 230 V AC mains.

DL01 DC inserter for remote powering of LR10 from LRPS.

Optional Protection lid for LR10's connector outlets

For more information about WISI's fiber optical product range, please contact your WISI sales representative, or visit our web site www.wisi.ch.

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