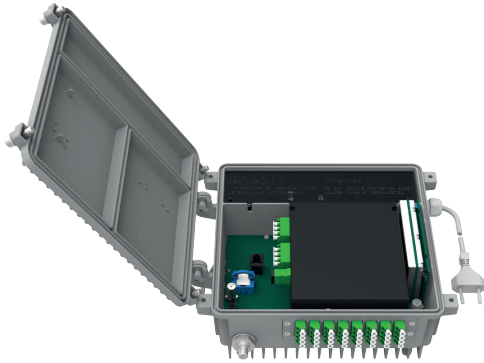


WISI LR 44 x xxxx

Inverted node in compact housing

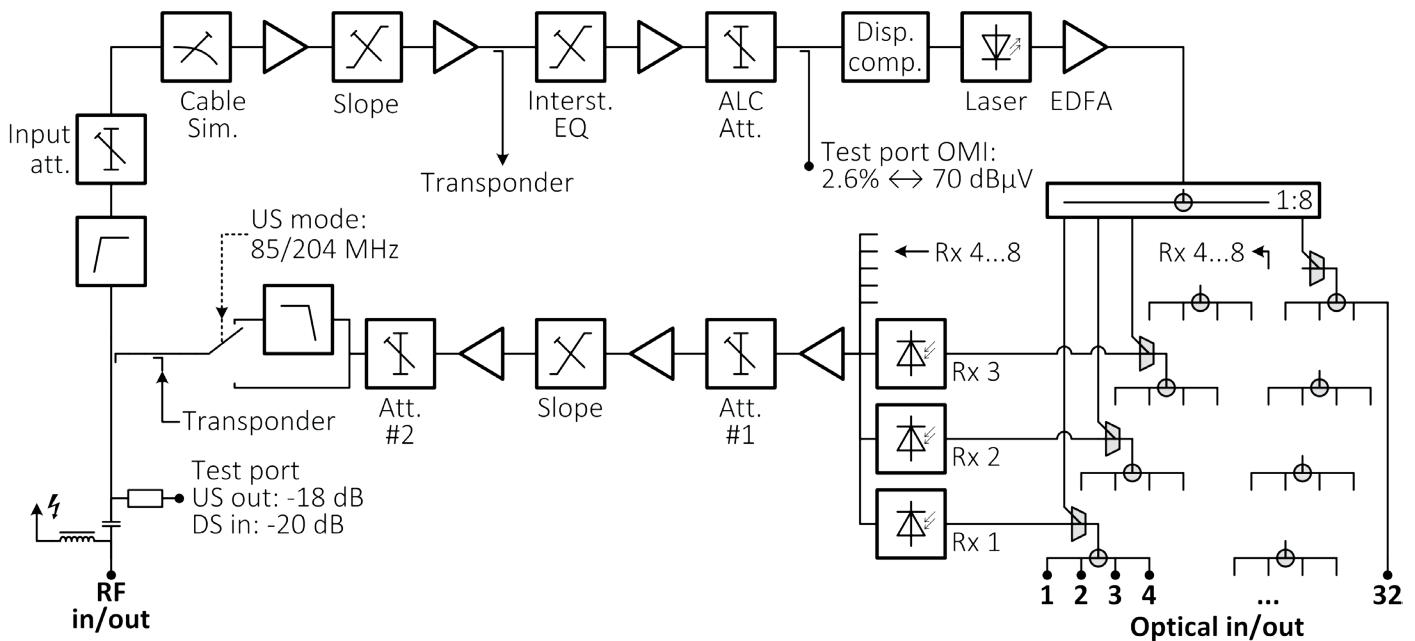


At a glance:

- Futureproof architecture
- Provide FTTH access through your existing HFC plant
- Local or remote feeding
- Superior RF performance
- Fully standard compliant with DOCSIS 3.0 and 3.1
- OBI free RFoG

Description

The LR 44 inverted node incorporates innovation for FTTH deployments to accommodate existing HFC plants. The highly integrated optical components allow the smallest footprint for OBI-free RFoG deployments including optical amplification and high splitting ratios to connect up to 32 ports with options for further internal splits. This ruggedized housing supports installation in harsh environments as well. With 1.2 GHz in downstream direction and up to 204 MHz (electronic switchable diplexer) in upstream direction. Therefore the LR 44 is the first choice for innovative forerunners and established MSOs.



Technical data

General optical parameters

Optical connector	LC /APC (optional: SC/APC for versions without internal splitter)
Optical return loss	>45 dB
Insertion loss US (Out FN-> PD_US)	<1 dB
Decoupling COM -> PD_US	>60 dB

Upstream (US)

Wavelength range for upstream	1260...1540/1560...1630 nm
RF ports impedance	75 Ω
RF connector	F-type, female
Frequency range	5(15)...204 MHz
RF output level	70...90 dBμV (OMI=5%/ch.)
Gain flatness	max. ±0,75 dB
Test point	-18 dB
Adjustable attenuator	0...40 dB (0,5 dB steps)
Adjustable slope	0...8 dB (0,5 dB steps)
RF return loss	>18 dB (-1 dB/oct., min. 16 dB)
Optical input power	-5...+3 dBm
Thermal noise power density	<7 pA/√Hz

Down-Stream / DS

Wavelength range for downstream	1555 nm (±0,1 nm), (or any DWDM channel)
Laser type	Temperature controlled DFB laser
Relative intensity noise (RIN)	< -155 dB/√Hz
Optical output power	>2,5 dBm (per port, including 8-port splitter loss)
Optical output power	>-4,5 dBm (per node if additional external or internal 4-way splitter is used)
RF ports impedance	75 Ω
RF connector	F-type, female
Frequency range	85...1218 MHz
RF return loss	>18 dB (-1.5 dB/oct., min. 14 dB)
RF input level	70 dBμV (PAL-Level)
Input attenuator	0...15 dB
Gain control range	-5...+5 dB (ALC)
Input cable simulator	0 / 5 / 10 dB (switchable)
Input testpoint (internal)	-20 dB
Output testpoint (internal)	Laser OMI (70 dBμV @ 2.6% OMI)

Signal Quality (all QAM) 121 QAM CH

MER	>40 dB (Values given for 2.6% OMI, 20 km fiber, optical Rx power -1.0 dBm)
BER	<1 x 10 ⁻⁹ (Values given for 2.6% OMI, 20 km fiber, optical Rx power -1.0 dBm)

Technical data

General data

Supply voltage	230 V AC / 27...65 V AC
Power consumption max.	<20 W
Operating temperature range	-20...+55 °C
EMC	EN 50083-2
Dimensions (width x height x depth)	260 x 215 x 101 mm

Monitoring

Upstream	
Attenuator	0...40 dB (0,5 dB steps)
Slope	0...8 dB (0,5 dB steps)
Port 1...4/1...8	On/Off
Port 1...4/1...8 optical receiver power	dBm

Downstream

Optical output power	dBm
Laser Temperature	°C
RF level	dB

LR 44 X XXXX

