## WISI DOCSIS 3.1 Inverted Node 8 Port LC-APC - 230VAC 20MM-LR44L8102



The LR44 inverted node is used for FTTX 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. In addition, this ruggedized housing supports installation in harsh environments like mining camps. With 1.2GHz in the downstream direction and up to 204MHz (electronic switchable diplexer) in the upstream direction providing flexibility, the LR44 is the first choice for innovative forerunners and established operators.

## **Features and Benefits**

- » Provide FTTX access through your existing HFC plant
- » 8 port LC/APC outputs with >2.5dBm
- » All settings available can be locally managed with an OH41 handset from WISI, web-based UI or via remote connected NMS with HMS transponder installed (VT52B, sold separate)
- » RF AGC for regulated input levels
- » DOCSIS-3.1-compliant frequency range: downstream up to 1.2 GHz, upstream up to 204 MHz (depending on diplexer)
- » Ruggedized housing with operating temperature range -20 to +55°C





## **WISI DOCSIS 3.1 Inverted Node 8 Port** LC-APC - 230VAC 20MM-LR44L8102





## 20MM-LR44L8102 Specifications

General optical parameters		
	LC /APC (optional: SC/APC	
Optical Input Power	for versions without internal	
	splitter)	
Optical Return Loss	>45 dB	
Insertion Loss US (Out	743 dB	
	<1 dB	
FN-> PD_US)		
Decoupling COM ->	>60 dB	
PD_US		
Upstream (US)		
Wavelength Range for	12601540/15601630 nm	
Upstream	12001340/13001030 11111	
RF Ports Impedance	75 Ω	
RF Connector	F-type, female	
Frequency Range	5(15)204 MHz	
RF Output Level	7090 dBµV (OMI=5%/ch.)	
Gain Flatness	max.30,75 dB	
Test Point	-18 dB	
Adjustable Attenuator	040 dB (0,5 dB steps)	
Adjustable Slope	08 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	5 13 dBill	
	<7 pA/√Hz	
Density		
Down-Stream / DS	1EEE nm (20.1 nm) (or any	
Wavelength Range for	1555 nm (30,1 nm),(or any	
Downstream	DWDM channel)	
Laser Type	Temperature controlled DFB	
	laser	
Relative Intensity Noise (RIN)	< -155 dB√Hz	
(RIN)	>2 E dDm (nor nort including	
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	851218 MHz	
RF Return Loss	>18 dB ( -1.5 dB/oct., min. 14	
	dB)	
RF Input Level	70 dBµV (PAL-Level)	
IN INPUT LEVEL	·	
Input Attenuator	015 dB	
	·	
Input Attenuator	015 dB	
Input Attenuator Gain Control Range	015 dB -5+5 dB (ALC)	

Output Testpoint	Laser OMI (70 dBµV @ 2.6%	
(Internal)	OMI)	
Signal Quality (all QAM) 121 QAM CH		
	>40 dB (Values given for 2.6%	
MER	OMI, 20 km fiber, optical Rx	
	power-1.0 dBm)	
	<1 x 10-9 (Values given for 2.6%	
BER	OMI, 20 km fiber, optical Rx	
	power-1.0 dBm)	
General data		
Supply Voltage	230 V AC / 2765 V AC	
Power Consumption	<20 W	
Max.	\20 VV	
Operating Temperature	-20+55 °C	
Range	-20133 C	
EMC	EN 50083-2	
Dimensions (W x H x D)	260 x 215 x 101 mm	
Monitoring		
Upstream		
Attenuator	040 dB (0,5 dB steps)	
Slope	08 dB (0,5 dB steps)	
Port 14/18	On/Off	
Port 14/18 Optical	dBm	
Receiver Power	авііі	
Downstream		
Optical Output Power	dBm	
Laser Temperature	°C	
RF Level	dB	