

## Optical node

### MON-1629LN (Low Noise)



- Dedicated to FTTB and RFoG networks
- Low-noise receiver
- High output RF level
- Frequency range 1GHz
- Easy uninterrupted adjustment
- Built-in AGC
- Local / remote powering
- Power transfer

**MON-1629LN** – is a compact optical node with high RF output level. It can be implemented in **FTTB** and **RFoG** applications.

**MON-1629LN** allows uninterrupted transmission in both – forward and reverse paths due to use of unique **AUTO-LINK** system in RF line during plug-in modules change. For the time of plug-in change, 5dB parallel circuit is automatically enabled. When plug-in module is placed, parallel circuit is disabled automatically. Switching time is app. 500ns.

**MON-1629LN** is equipped with laser action enabling mechanism - **BURST MODE**. Return path optical transmitter is enabled when modem transmission is detected. Transmitter turns ON when signal level reaches 72 dB $\mu$ V (level can be adjusted) on input port of optical node. Due to such mechanism, operator may – via optical splitter – connect several optical nodes, depending on network topology and transmit signal to Return Path Receiver in Head End. This solution reduces noise level in return Path.

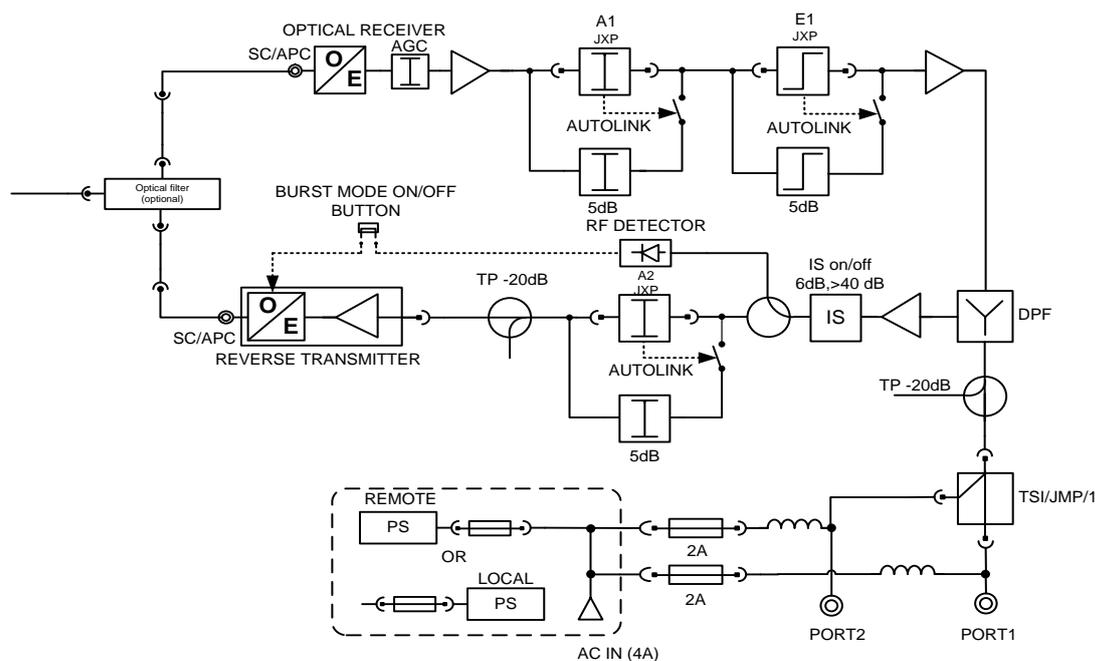
**MON-1629LN** is a modern optical node that meets expectations resulting from conditions at the last mile of a fibre. It allows flexible network configuration basing on topology and business requirements. Basing on standard configuration modules it is easy to configure and allow maintenance costs reduction.

## TECHNICAL PARAMETERS

PARAMETERS			MON-1629LN			
<b>OPTICAL PARAMETERS</b>			<b>RETURN PATH</b>			
Input optical power range	dBm	-9...+2	Frequency range	MHz	5...65, 85	
AGC range	dBm	-6...0	Gain	dB	30 ±0,75	
Return loss	dB	>45	Return loss	dB	≥18@40MHz -1,5dB/oct.	
Optical input wavelength	nm	87,110...1650				
Equivalent input noise current	pA/√Hz	≤7	Gain characteristic flatness	dB	±1	
Optical connector	/	SC/APC	Attenuator A3	dB	JXP plug-in: 0...20	
<b>FORWARD PATH</b>			<b>Test point</b>			
Frequency range	MHz	87, 110...1002	Transmitters	1310FP 0dBm 1310/1550 DFB 3dBm CWDM DFB 3dBm		
Gain characteristic flatness	dB	±0,75				
Maximum output level (CENELEC 42) 1310nm@ -3dBm E1=6 dB, 4% OMI, AGC ON, CTB ≤ 60dBc, CSO ≤ 60dBc	dBμV	114	<b>OTHER</b>			
Interstage attenuator A1	dB	JXP plug-in: 0...15, step 1	Power supply	local: MON-1629LN	V <sub>AC</sub> /Hz	180...253 / 50-60
				remote: MON-1629LNZ	V <sub>AC</sub> /Hz	24...65 / 50-60
Interstage equalizer E1	dB	JXP plug-in: 0...15, step1	Power consumption	W	>17 <sup>1)</sup>	
			Test point	dB	-20 ±1	Connector
Return loss @ RF output	dB	18 (40 MHz) -1,5 dB/oct	Protection class	/	IP52	
			Operating temperature	°C	-20...+55	
			Weight	kg	1,3	
			Dimensions	mm	235x145x80	
			Package	/	box	

1) – with OTBM return path transmitter

## BLOCK DIAGRAM



Technical parameters may be changed without earlier notice.

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