

MON-1629LN (Low Noise)



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

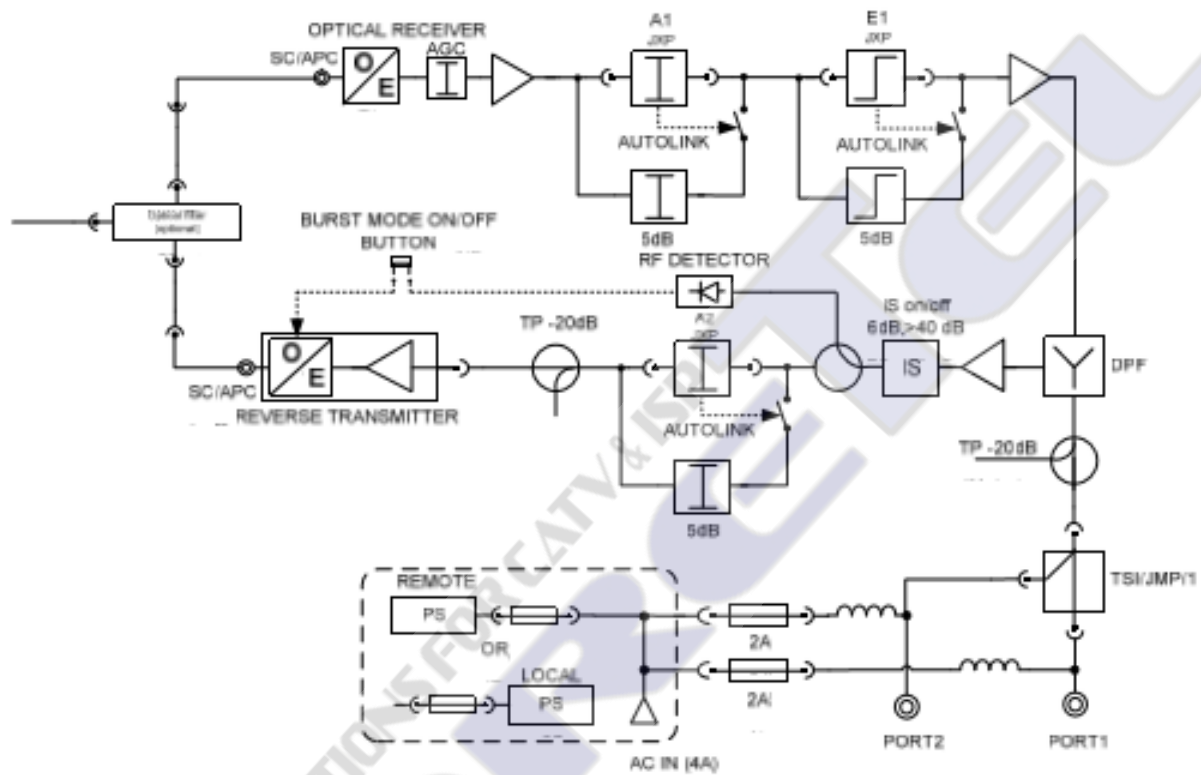
detected. Transmitter turns ON when signal level reaches 75dB/uV on input port of optical node. Due to such mechanism, operator may – via optical splitter – connect several optical nodes, depending on network topology and transmit signal to Return Path Receiver in Head End. This solution reduces noise level in return Path. **MON-1629LN** is a modern optical node meeting requirements of last fiber mile race. It allows flexible network configuration basing on topology and business requirements. Basing on standard configuration modules it is easy to configure and reduces maintenance costs.

- Low-noise receiver
- Dedicated for FTTB and RFoG networks
- High output RF level
- Frequency range 1GHz
- Easy uninterrupted adjustment
- Built-in AGC
- Local/remote powering
- Compatible with SCTE 174 Standard




Technical parameters

Optical parameters			Return path		
Input optical power range	dBm	-9..+2	Frequency range	MHz	5...65 5...85
AGC range	dBm	-6..0	Gain	dB	30 ±0,75
Return loss	dB	>40	Return loss	dB	18@40Mhz- 1,5dB/oct
Optical input wavelength	nm	1100..1650	Gain characteristic flatness	dB	±0,75
Equivalent input noise current	pA/√Hz	<7	Attenuator A3	dB	0..20
Optical connector	/	SC/APC	Test point	dB	20 ±1
Forward path			IS (Ingress Switch)	dB	0/-6/-40
Frequency range	MHz	87...1002 110...1002	Transmitters	1310FP 0dBm 1310 DFB 3dBm, 1550DFB 3dBm, CWDM DFB 3dBm	
Gain characteristic flatness	dB	±0,75	Other		
Maximum output level (CENELEC 42) 1310nm@ -3dBm E1=6 dB, 4% OMI, AGC ON, CTB ≤ 60dBc CSO ≤ 60dBc	dBuV	114	Local Powering Remote Powering	V/Hz	180...253/ 50-60 24...65/50-60
Interstage attenuator A1	dB	0..15	Power consumption	W	<17*
Interstage equalizer E1	dB	0..15	Output connector		PG11, 5/8"
Test point	dB	-20 ±1	IP class	IP	64
Return loss @ RF output	dB	18 (40MHz) -1,5dB/oct	Working temperature range	°C	-20..60
			Weight	kg	1,3
			Dimensions	mm	235x145x80

Block diagram



RF plugins

-  JMP/1 – jumper – supports one RF output
-  TSI – tap – supports two RF outputs
-  STI-3,5M – splitter – supports two RF outputs