Optical node

TELMOR

MON-1931, DOCSIS 3.1



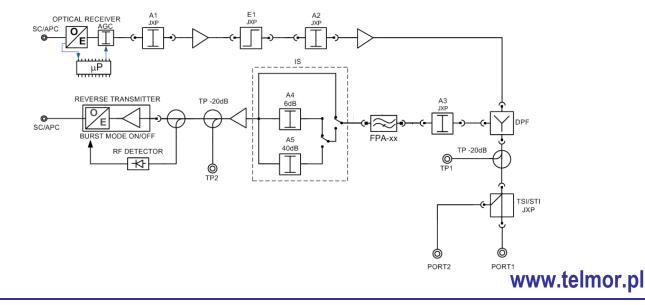
- Dedicated to FTTB and RFoG networks
- High output RF level
- Frequency range 1.2GHz
- Perfect bandwidth
- Built-in AGC (Automatic Gain Control)
- Local and remote powering (exchangeable power supply)
- Compatible with SCTE 174 Standard



MON-1931 is a compact optical node that features high RF output level; it has been widely applied in **FTTB** and **RFoG** networks. Node is designed for DOCSIS 3.1 transmission. Broadcast channel band is 1218MHz. Replaceable DPF filter enables adjustment of return path bandwidth.

MON-1931 is equipped with **BURST MODE** to commence laser action. Return path optical transmitter is activated upon detection of modem transmission. The transmitter activation level is 72dB μ V on the optical node input port. Due to application of such mechanism, user can connect several nodes through the optical splitter – according to the network topology – and transmit a signal with single fibre to a single return path optical receiver located in the head end. This function supports also lowering the noise floor that is received by that receiver.

MON-1931 is a modern optical node that meets expectations resulting from conditions at the last mile of a fibre. Its construction, which is based on standard control components, ensures simple servicing and cost optimisation.



BLOCK DIAGRAM

TECHNICAL PARAMETERS

PARAMETERS			MON-1931
OPTICAL PARAME	TER		
Input optical power range ¹⁾		dBm	-9+3
AGC range		dBm	-60
Optical input wavelength		nm	11001650
Equivalent input noise current		pA/√Hz	<6
Optical connector		1	SC/APC
FORWARD PATH			
Frequency range		MHz	85/102/110/2561218
Output level ²⁾		dBµV	116
Gain characteristic flatness		dB	<±1
Interstage attenuator A1		dB	JXP plug-in: 0…20, step1
Interstage equalizer E1		dB	JXP plug-in: 0…20, step1
Interstage attenuator A2		dB	JXP plug-in: 0…20, step1
Test point		dB	-20±1
Return loss@RF output 3)		dB	18
RETURN PATH		•	
Frequency range		MHz	565/85/204
Gain		dB	20
Return loss 3)		dB	18
Gain characteristic flatness		dB	±1
Attenuator A3		dB	JXP plug-in: 0…20, step1
Equalizer E1		dB	JXP plug-in: 0…20, step1
Test point		dB	-10
OTBM Transmitters		1	1310FP 0dBm 1310/1550 DFB 3dBm CWDM DFB 3dBm
OTHER			
Power supply	local: (MON-1925)	V _{AC} / Hz	180253 / 50-60
	Remote: (MON-1925Z)	V _{AC} / Hz	2465 / 50-60
Power consumption ⁴⁾		W	<23
Output connector		1	5/8'
Protection class		IP	65
Working temperature range		°C	-20+65
Weight		kg	1,6
Dimensions		mm	223x151x98
Package		1	box

1) 2) 3) 4)

AGC range -6 … 0dBm 42 analog channels (CENELEC), CTB<-60 dBc and CSO<-60 dBc, 1310nm@ -4dBm, 3% OMI, AGC ON, 0dB slope 18 dB for f≤ 40MHz, 18 dB-1,5dB/oct. for f>40MHz Without return path transmitter

Technical parameters may be changed without earlier notice.