Fiber optics equipment



Optical nodes Optical receiver

Optical receiver with capability to monitor and control all major functions via Ethernet.

- monitor and control all major receiver parameters via Ethernet (transmission protocol TCP/IP (supports SNMPv2c))
- supplying with free management software OD_Explorer
- input and output controllable ports for external devices
- electronic setting of all parameters
- AGC based on optical input level
- 1 or 2 RF outputs, switchable
- thermal compensation of RF output level drift
- digital indication of optical input level
- and other parameters
- die-cast housing
- connectors: RF output and test - type F

optical - SC/APC Ethernet - RJ45



Technical specifications	I
ТҮРЕ	OD120
Ordering number	02850
Optical wave lenght	1100-1600 nm
Optical input level (AGC range)	-72 dBm
Optical return loss	> 40 dB
Noise current density	≤ 7.0 pA/√Hz
Frequency range	47-862 MHz
Impedance	75 Ω
Return loss	\geq 18 dB at 40 MHz-1.5 dB/oct
Frequency response	± 0.75 dB
Output level (AGC controlled, 4.9% OMI)	113 dBµV
Output level CTB (\leq 60 dB, 42 ch. Cenelec)*	113 dBµV
Output level CSO (\leq 60 dB, 42 ch. Cenelec)*	113 dBµV
Interstage attenuator pr.	0-15 dB by 1 dB step
Interstage equalizer pr.	0-15 dB by 1 dB step
Loss in test point	-20 dB \pm 0.7 dB
Power consumption	187-250 V~ 50/60 Hz 14 W
Operating temperature range	-20° ÷ + 50° C
Dimensions/Weight (packed)	213x138x76 mm (with fixing earth) /1.4 kg

* output level (CTB, CSO) is measured with 6 dB interstage equalizer

pr. software control

Remotely monitored parameters:

- temperature
- optical input power
- RF output level
- internal DC supply voltage

Remotely controlled parameters:

- value of first attenuator
- value of second attenuator
- value of equalizer

Remotely controllable ports:

- alarm circuit input
- relay output
- UPS status port





Optical nodes Application diagram



Application diagram of OD120 installation with possibility to send security alarm signal, mains fail signal and reset off Ethernet switch in case of dissapearing response to PING.

Control and monitoring software

OD Explorer - software for remote management of OD120 optical receivers:

- control and diagnostic by SNMP protocol
- automatic discovery of receivers OD120 in the LAN
- user-friendly graphical presentation
- embedded Telnet client

	SNMP objects	Device Status
	sysName Node #2	Opt. signal Mains pwr. ALC Base link
	sysLocation Test bench pos. #2	Dev. tempr.
D Explorer Vers.1 .0 .1 beta	sysContact service@test.net	 Opt. degrade RF degrade
Help	sysUpTime 5 hours 2 min.	BF signal
P address By System Name		Ext. circuit
32.168.0.93 ▼ Node #2	Device Control	Measured values
	ALC V Att1	-7.1 Opt. level dBm
anage Telnet Settings	4 dB 🗸 Att2	-71 RF level dBm
IP address 192 . 168 . 0 . 93	0 dB v Equ	12.0 U12 V
onnecting 192.168.0.93	Off Opt. alarm	53 Tempr. deg C
sloome to UD210-01 Telnet serve	2 dB 💌 RF alarm	
0210-01 SNMP station vers. 1.1 ase unit OD120 vers. 1.05 SN (Closed - Relay	
ogin: guest		
ssword: **** lcome guest	Device info	
- ess ? for help	Device type 0D120 Firmware vers. 1.05	SN 0D12000009060120
21.0	LAN interface TERRA UD210-01 SNMP station vers. 1.	10 Ping 1 mS
J210/	state Ide	

By System Location
 Test bench pos. #2

OD Explorer V

By IP address By System Nam 192.168.0.93 ▼ Node #2

Free software program **OD Explorer** could be downloaded from **www.terraelectronics.com**, section **downloads**.