



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	
T Y P E	OD120
Ordering number	02850
Optical wave length	1100-1600 nm
Optical input level (AGC range)	-7 ...2 dBm
Optical return loss	> 40 dB
Noise current density	≤ 7.0 pA/√Hz
Frequency range	47-862 MHz
Impedance	75 Ω
Return loss	≥ 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 (≤ 60 dB, 42 ch. Cenelec)*	113 dBμV
Output level CSO (≤ 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 ± 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:

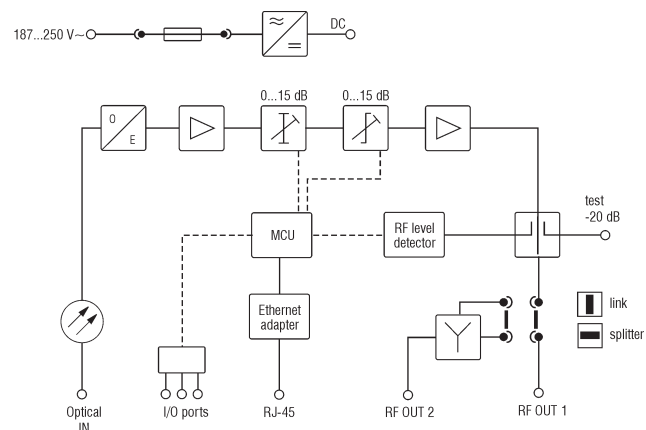
- temperature
- optical input power
- RF output level
- internal DC supply voltage

Remotely controlled parameters:

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

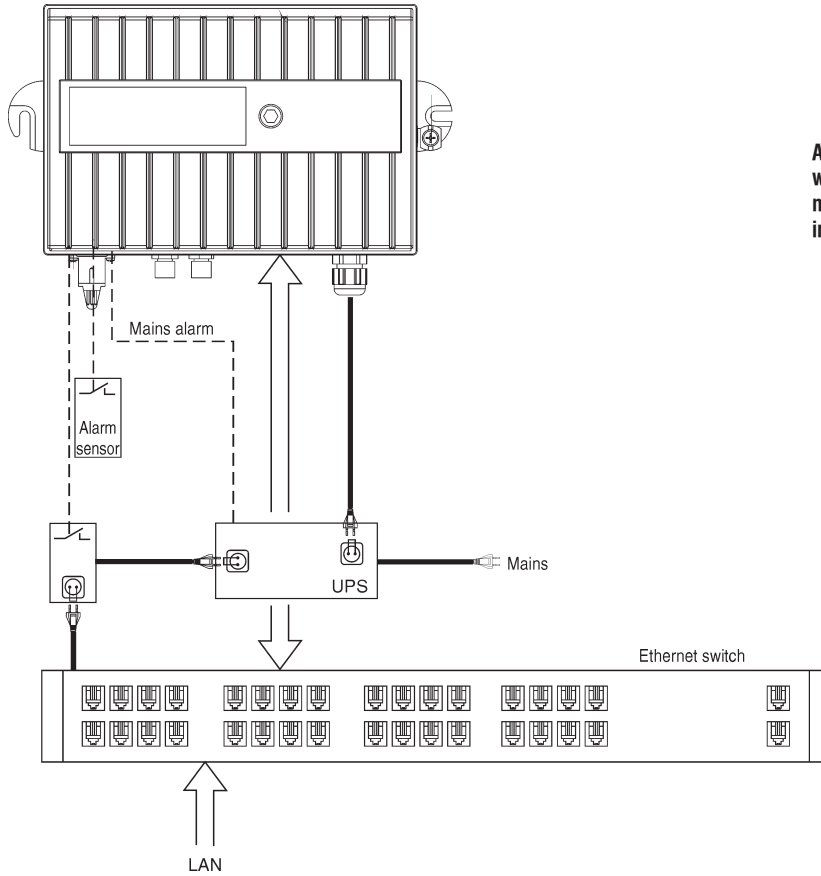
Remotely controllable ports:

- 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 disappearing 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

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

