

## MDO800E COMPACT FORWARD PATH OPTICAL RECEIVER WITH MONITORING



- Fully electronic local alignment interface
- Ethernet based SNMP monitoring
- Optical AGC
- Optimized for TV band
- Cost effective solution

### GENERAL DESCRIPTION

The MDO800E optical node is developed for customers, who provide only video services by the conventional HFC network, but want to achieve the advantages of a monitoring system. The RF section is optimized for the TV band, contains an optical AGC, while the monitoring circuit delivers information about the total output RF power change, the RF alignment (EQ, AT) and other working parameters (temperature, DC voltage etc.) via an independent Ethernet connection.

### TECHNICAL SPECIFICATIONS

#### Optical receiver parameters

Bandwidth [MHz]	47...862
Wavelength [nm]	1290...1570
Optical input level range [dBm]	-7...+2
Nominal optical input level [dBm]	0
Optical input return loss [dB]	>45
Equivalent input noise [pA/√Hz]	6
Level control	OLC
Output level accuracy [dB]	±1
Flatness [dB]	±0.7
Optical connector type	SC/APC, FC/APC, EURO2000

#### RF parameters

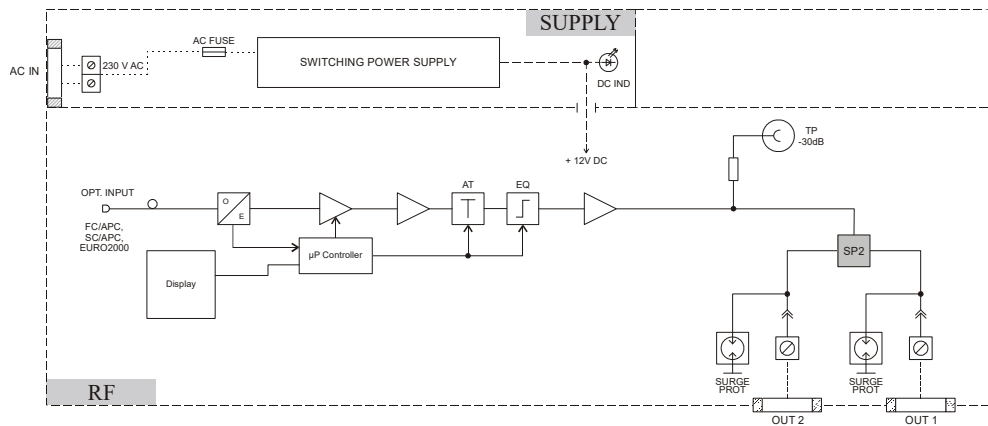
Max. adjustable output level (OMI=4%, ATT=0, EQ=0) [dBμV]	115
Max. output level (EN60728, 42 ch, 8dB SLOPE, CTB, CSO ≤-60dBc) [dBμV]	112
Output testpoint attenuation [dB]	30±1
Flatness [dB]	±0.7
Output amplifier-module type	GaAs MMIC
Number of active outputs	1 (splittable)
Output return loss (40MHz -1.5dB/octave) [dB]	>18
Output impedance [Ω]	75
Attenuator in forward path (step: 0.5dB) [dB]	0-15

*Specifications are subject to change without notice!*

TILT in forward path (step: 0.5dB) [dB]	0-15
Breakpoint frequency of TILT [MHz]	862
<b>Communication parameters</b>	
Ethernet interface type	10BaseT
Connector type	RJ45
Protocols	IETF RFC 891 (IPv4) IETF RFC 792 (ICMP) RFC 2131 (DHCP) RFC 1067 (SNMPv1)
<b>Remote controlled parameters</b>	
Attenuator in forward path	yes
TILT in forward path	yes
<b>Measured parameters</b>	
Input optical power	yes
Output total RF power deviation from a set reference	yes
DC powering voltage	yes
Temperature	yes
<b>General parameters</b>	
Screening factor [dB]	80
Maximum power consumption [W]	10
Power supply voltage [VAC]	~ 230
Degree of protection	IP 43
Temperature range [°C]	-20...+50
RF connector type	PG11 (5/8", F)
Dimensions [mm]	202x146x80
Weight [kg]	1.6

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BLOCK DIAGRAM



ORDERING INFORMATION

**M D O 8 0 0 E - X X**

Type of the optical connector	
SA	SC/APC (Recommended type)
FA	FC/APC
EU	EURO2000

Option	Required modules	Ordering codes
Coax connection option	PG11-5/8" adaptor	PG11-5/8
Coax connection option	PG11-F adaptor	PG11-F

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