



CATV range equipment

Optical receiver with RP transmitter

- electronic setting of all parameters
- AGC based on optical input level
- digital indication of optical input level and other parameters on built-in LED display
- switchable ingress blocking filter
- uncooled FP laser diode for CATV return path application
- 5 MHz pilot generator inside
- die-cast housing
- connectors:
optical - SC/APC
RF output and test - type F



Technical specifications

T Y P E		OD110*	OD110D*
Forward path			
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** (depending on diplexer)		47/75/87/108-1002 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, EN50083-3)		111 dBμV (42 ch.)	
Output level (CSO, EN50083-3)		112 dBμV (42 ch.)	
Interstage attenuator	pr.	0-15 dB by 1 dB step	
Interstage equalizer	pr.	0-15 dB by 1 dB step	
Test point		-20 dB ± 0.7 dB	
Return path			
Laser diode type		FP	
Optical output power*		1/2 mW	
Wave length***		1310 ± 10 nm	
Frequency range** (depending on diplexer)		5-30/55/65/85 MHz	
Ingress blocking filter attenuation	pr.	> 20 dB up to 15 MHz; < 0.5 dB from 20 MHz	
RF input level		75-95 dBμV	
Return path attenuator	pr.	0-25 dB by 1 dB step	
Input return loss		18 dB	
Pilot tone	pr.	5 MHz	
Test point		-20 ± 0.5 dB	
General			
Mains voltage, 50/60 Hz		187-250 V~	24±65 V~
Power consumption, max.		15 W	15 W
Current consumption	24 V AC	-	1 A
	42 V AC	-	0.67 A
	65 V AC	-	0.5 A
Operating temperature range		-20° + 45° C	
Dimensions/Weight (packed)		213x138x76 mm/1.4 kg	

* ordering information:

Type	Laser	Ordering number
OD110R1	1mW 1310 nm	02851
OD110DR1	1mW 1310 nm, remote powering	02853

** Frequency range

30/47 MHz
55/75 MHz
65/87 MHz
85/108 MHz

Diplexer

pd 06-30
pd 06-55
pd 06-65
pd 06-85

*** DFB laser diodes for CWDM (1470...1610 nm) band are supplied by special request

pr. software control

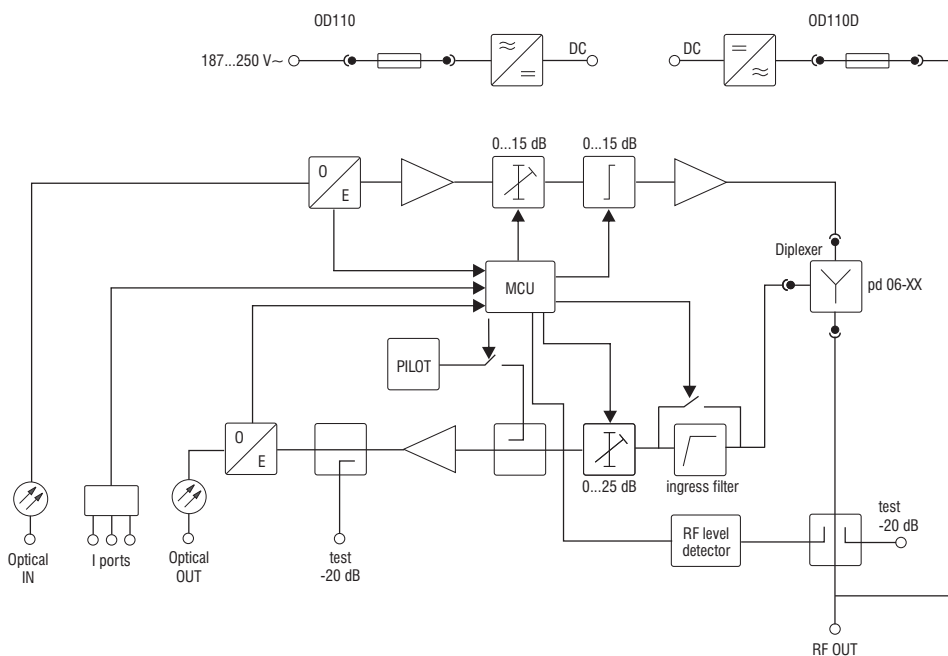




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Structure diagram

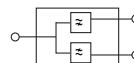


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Plug-in modules

Plug-in diplexers



Technical specifications		pd 06-30	pd 06-55	pd 06-65	pd 06-85
TYPE					
Ordering number		12870	12871	12872	12873
Frequency range	return path	5-30 MHz	5-55 MHz	5-65 MHz	5-85 MHz
	forward path	47-1002 MHz	75-1002 MHz	87-1002 MHz	108-1002 MHz
Attenuation	5 MHz	≤ 0.2 dB			
	1002 MHz	≤ 1.3 dB at 30 MHz	≤ 1.3 dB at 55 MHz	≤ 1.4 dB at 65 MHz	≤ 1.5 dB at 85 MHz
		≤ 1.3 dB at 47 MHz	≤ 1.3 dB at 75 MHz	≤ 1.3 dB at 87 MHz	≤ 1.4 dB at 108 MHz
Return loss	≥ 20 dB at 40 MHz reduction - 1.5 dB/octave				