1 SAT IF distribution equipment

Modular optical transmitters

- suitable for SAT IF and CATV application
- option with Web control and SNMP agent functionality marked by letter L, e.g. mo418L, page 4.17
- low signal loss over long distances
- simple installation in the headend with easy module parameter set-up
- loop through RF distribution
- AGC mode for constant laser loading
- manual gain control allows to maintain optimum operation over wide range of input signals
- LED display for easy setup and maintenance
- DIN rail or wall mounting
- robust die-cast housing
- recommended power supplies, page 4.14
- connectors:
  3xRF input/output and test - type F
  optical - SC/APC
  power distribution bus

mo418
mo428



mo418L
mo428L



Technical specifications

TYPE		mo418*		mo428*	
Number of optical outputs		1		2	
Optical power		1x6 dBm		2x6 dBm	
Optical wave lenght		1310 ± 10 nm	1550 ± 3 nm	1310 ± 10 nm	1550 ± 3 nm
Laser type		DFB			
RF frequency range		47-2400 MHz			
RF input level		70-85 dBμV			
RF input impedance		75 Ω			
Gain adjustment		0...-15 dB by 1 dB step			
AGC range		± 5 dB			
RF input loop through	frequency range	47-2400 MHz			
	loss	< 1 dB			
	flatness	± 1.0 dB			
Return loss		≥ 18 dB at 40 MHz -1.5 dB/oct (47-950 MHz); ≥ 10 dB up to 1750 MHz; ≥ 7 dB up to 2400 MHz			
Relative intensity noise RIN		< -150 dB/Hz			
Terr.TV	intermodulation distortion CSO**	> 60 dB	> 55 dB	> 60 dB	> 55 dB
	intermodulation distortion CTB**	> 62 dB	> 60 dB	> 62 dB	> 60 dB
	carrier/noise ratio C/N**	> 51 dB	> 50 dB	> 51 dB	> 50 dB
SAT IF intermodulation distortions* **		> 35 dB			
Supply voltage		12 V ± 1 V			
DC feeding for external		12 V 0.4 A			
Current consumption		0.35 A max.		0.4 A max.	
Operating temperature range		0° ÷ + 50° C			
Dimensions/Weight (packed)		198x107.5x36 mm/ 0.9 kg			

* ordering information:

Type	Laser	Ordering number
mo418 4D31	6 dBm 1310 nm	02883
mo418 4D55	6 dBm 1550 nm	02884
mo428 4D31	2x6 dBm 1310 nm	02885
mo428 4D55	2x6 dBm 1550 nm	02886

** OMI=4.0 %, 42 channel CENELEC, optical receiver input power - 2 dBm

*** OMI=20 %, two tone test metod according EN50083-3

Transmitter features for option with WEB control:

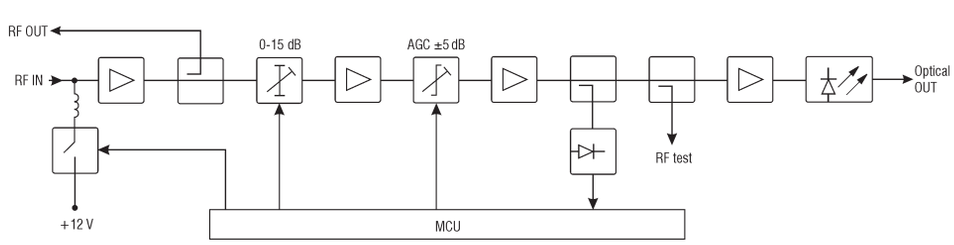
Type	Laser	Ordering number
mo418L 4D31	6 dBm 1310 nm	02883L
mo418L 4D55	6 dBm 1550 nm	02884L
mo428L 4D31	2x6 dBm 1310 nm	02885L
mo428L 4D55	2x6 dBm 1550 nm	02886L

Remotely monitored parameters:

- RF average power
- laser current
- external voltage on RF IN
- supply voltages
- temperature inside
- diagnostic information

Remotely controlled parameters:

- attenuator level
- AGC mode
- switch external voltage on RF



See page 4.17