



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
- 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
- connectors:
 - 3xRF input/output and test - type F
 - optical - SC/APC
 - power distribution bus

mo418
mo428



mo418L
mo428L



Technical specifications

T Y P E		mo418*	mo428*
Number of optical outputs		1	2
Optical power		1x6 dBm	2x6 dBm
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	
Terr.TV	intermodulation distortion CSO**	> 55 dB	
	intermodulation distortion CTB**	> 60 dB	
	carrier/noise ratio C/N**	> 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)		36x198x107.5 mm/ 0.9 kg	

* ordering information:

Type	Laser	Ordering number
mo418 4D31	6 dBm DFB 1310 nm	02883
mo418 4D55	6 dBm DFB 1550 nm	02884
mo418 4F31	6 dBm FP 1310 nm	03890
mo428 4D31	2x6 dBm DFB 1310 nm	02885
mo428 4D55	2x6 dBm DFB 1550 nm	02886
mo428 4F31	2x6 dBm FP 1310 nm	03892

** 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

Remotely monitored parameters:

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

Type	Laser	Ordering number
mo418L 4D31	6 dBm DFB 1310 nm	02883L
mo418L 4D55	6 dBm DFB 1550 nm	02884L
mo418L 4F31	6 dBm FP 1310 nm	03891
mo428L 4D31	2x6 dBm DFB 1310 nm	02885L
mo428L 4D55	2x6 dBm DFB 1550 nm	02886L
mo428L 4F31	2x6 dBm FP 1310 nm	03893

Remotely controlled parameters:

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

