

OPS1001 two-way optical station

Description

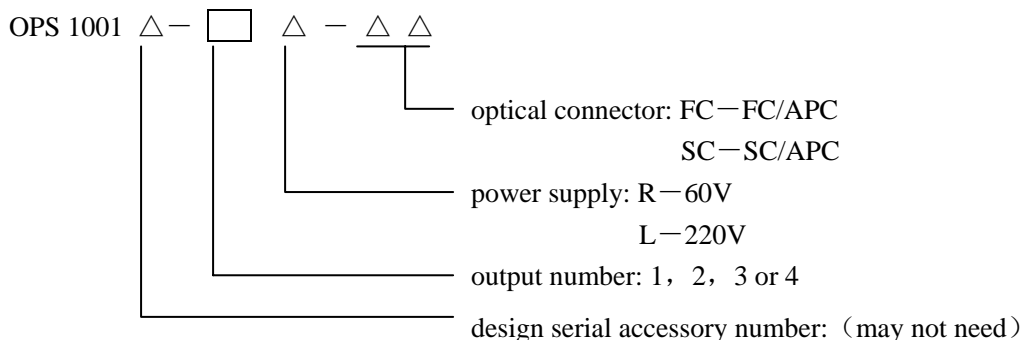
The forward receiver adopt the high performance active photoelectric module with ORTEL technology, the RF amplifier adopt the GaAs power double gain module; and the reverse transmitter adopt the high quality IFP laser, the output power is 0~3dbm. In addition, the cost of this product reduced by adopting the latest applied technique of the photoelectric products. This product becomes much suitable for the HFC network after times of improvement. The fiber management as well as the RF output form is able to satisfy the requirement of different users.



Feature

- The forward receiver adopt the high performance active photoelectric module with ORTEL technology, and the reverse transmitter adopt the high quality IFP laser
- The GaAs power double gain module improves the performance of RF amplifier.
- When OPS1001 has dual channel outputs, each output level will reach 110 dB μ V (pin=-1dB, 9dB tilt output at 85~862MHz), when OPS1001 has quad output ports, each output level will reach 106 dB μ V.
- The reverse optical module and the duplex filter module are able to be updated on-line.
- Input optical power test point at 0.2mw/v; LED alarm for optical signal loss, easy to test optical circuit operation.
- Optical connection with waterproof; many forms of ways to connect fibers
- Aluminum alloy die-casting housing with good waterproof, operating outdoor condition.

Product identification system



Specifications

Item	Note	OPS1001	Unit
Forward path			
optical characteristics			
Optical fiber		9/125/900	μ m
Optical receiver wavelength		1100~1600	nm
Optical return loss		>45	dB
Optical input power range		+3 ~ -7	dBm
Optical connector		SC/APC or FC/APC	
Input optical power test point		0.2	mW/V
RF output			
Frequency range		47~750/862	MHz
flatness		±0.75 (47~862MHz)	dB
Return loss		16@550MHz, 14@862MHz	dB
Output port number	1	1~4	
Output impedance		75	Ω
Output level	2,5	42~50	dBmV
Test port		-20	dB
Link performance			
C/N	2,3,4	51	dB
CSO	2,3,4	-62	dBc
CTB	2,3,4	-66	dBc
Reverse path			
optical characteristics			
Type of laser		Isolated Fabry-Perot	
Optical wavelength		1310±20	nm
Output optical power		0 to 3	dBm
Fiber connector		SC/APC or FC/APC	
Output optical power test point		1	mW/V
RF input			
Frequency range		5~200	MHz
Slope		0 to -1	dB
Flatness		±0.5	dB
Return loss(75ohms)		16	dB
RF input test point		- 20	dB
RF total driver level (from 5 to 65MHz)		76	dB μ V
Link performance			
NPR dynamic range		≥15 (NPR≥30)	dB
Power supply			
AC operating voltage		40~90	V
Operation environmental temperature		- 25 ~ + 55	℃

- Note
- 1: Output ports (from 2 to 4) optional.
 - 2: Optical receiver input power -1dBm.
 - 3: PAL-D/K 59 channels Chinese standard.
 - 4: Refer to OT7C&OT8C or TXA optical transmitter performance table.
 - 5: 4 output ports, RF output level 9dB slope, each output 46dBmV.