

OPS2000 two-way optical station

Description

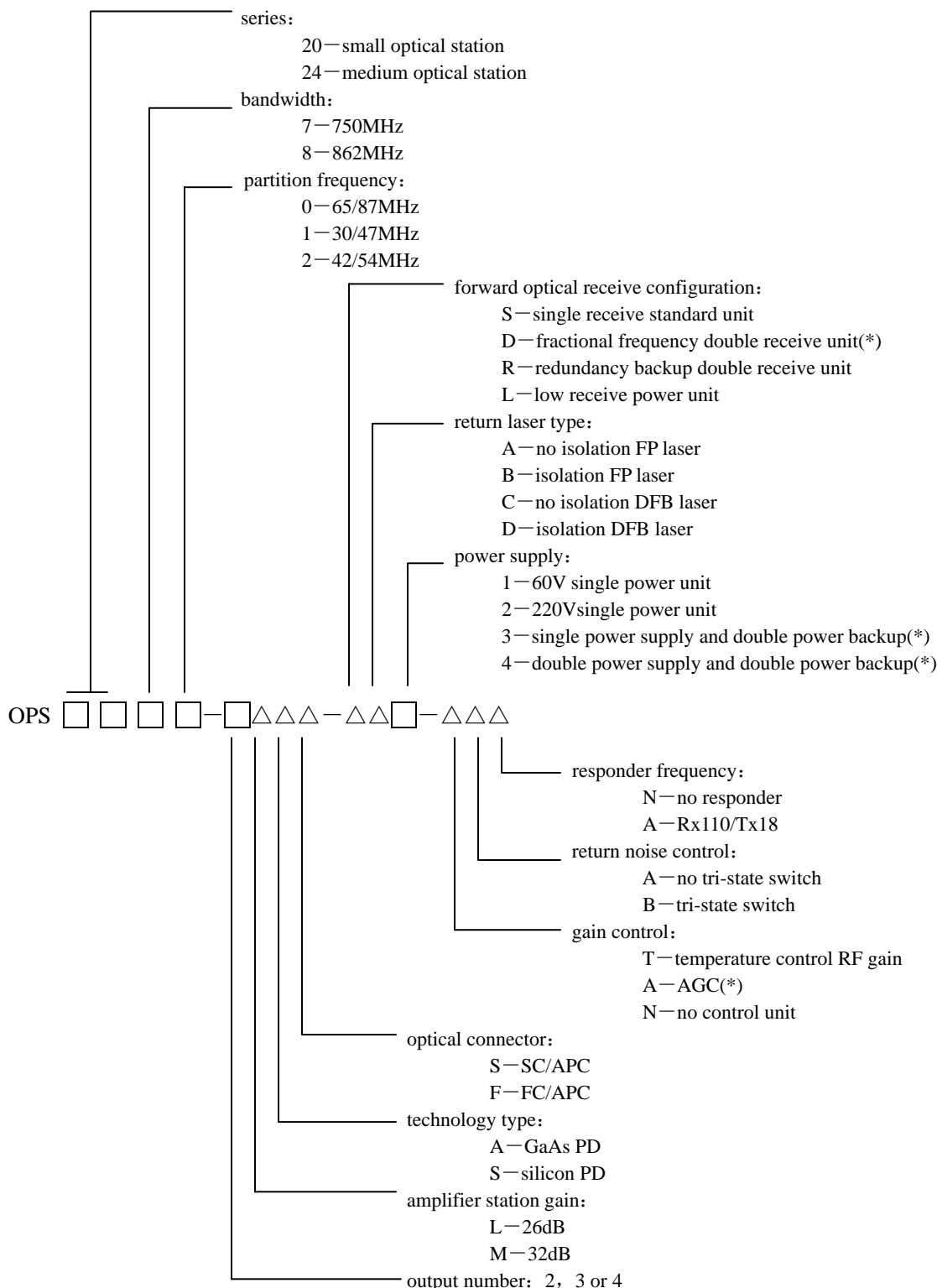
OPS2000 two-way optical station is the latest high-performance product mainly designed for the rapid development of the integrated data business of CATV HFC network. The product can be used for the HFC network updating and reconstruction. It's ring network physical protection and renew function provides auto switch between fiber and coaxial cable in poor working condition by status monitor and redundant switch driver so that the requirement of high reliability and rapidly restore of two-way interactive service can be satisfied.



Feature

- Equipped with two optical receiver module and coaxial cable signal port, status monitor and redundant switch driver bring switching automatically.
- 3-state switch separately equipped for reverse path so that headend control center can know and eliminate interference in time.
- There will be three choices, separate dual-port, tri-port or quad-port high-level output, output level $\geq 107\text{dB } \mu\text{V}$, and output level will be $112\text{dB } \mu\text{V}$ if use GaAs technology, and also output level can be monitored separately.
- Kinds of compatible network condition management and monitoring module available.
- Compact model design and optimized thermal design increase the reliability of whole-station performance.
- Monitor and alarm for optical power and voltage, easy to test.
- AC60V high efficiency switching power supply.

Order information



(*):there is no optional item in the OPS2000.

Specifications

OPRM862/25 optical receiver module

Item	Note	OPRM862/25	Unit
optical characteristics			
Optical fiber		9/125/900	μ m
Optical receiver wavelength		1100~1600	nm
Optical return loss		>40	dB
Optical receiver power range		3 to -7	dBm
Optical connector		SC/APC or FC/APC	
In/out optical power test point		0.2	mW/V
RF output			
Frequency range		45~862	MHz
Slope		0 to -1	dB
Flatness		±0.5	dB
Return loss		14	dB
RF output level (Pin=-1dBm)	1	25	dBmV
Link performance			
C/N	1	51	dB
CSO	1	-63	dBc
CTB	1	-68	dBc
Power supply			
DC voltage		24	V
Operating current		200	mA
Dimensions		14.5×3.6×3.0	cm

Notes 1: Can be used with TXA or OT8C transmitter in optical link, 10km fiber + optical attenuator, receiving optical power -1dBm,PAL 59 channels,link performance see TXA optical transmitter link table.

Item	Note	OPA397/26	OPA398/26	Unit
Forward path				
Frequency range		45~750	45~862	MHz
Flatness		±0.5	±0.5	dB
Return loss		16	16	dB
NF		9	9	dB
Minimum full gain (750 or 860MHz) L/M		26	26	dB
Reference output level (47MHz/550MHz/750or862MHz)		36/43/46	36/43/47	dBmV
CSO	1	-72	-72	dBc
CTB	1	-74	-74	dBc
inter modulation distortion CM	1	-70	-70	dB
Reverse path				
Frequency range		5~65	5~65	MHz
Flatness		±0.5	±0.5	dB
Return loss		16	16	dB
NF (4 channels composite loss)		14	14	dB
Minimum full gain		15	15	dB
Maximum output level		123	123	dB μ V
AC fuse		10	10	A
AC noise modulate		66	66	dB
DC operating current (24V)		1.8/2.2	1.8/2.2	A
Dimensions		35.5×22.5×16.5	35.5×22.5×16.5	cm
Weight		6.0	6.0	kg
Operation environmental temperature		-25~65	-25~65	°C

Note 1: reference output level from 47 to 550MHz, PAL-D 59 channels TV signal, test condition above 550MHz (-10dB) delivering digital signal or narrow band broadcasting.

OPT2000 reverse optical transmitter module

Item	Note	OPTM200	Unit
Optical characteristics			
Type of laser		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 driver level (from 5 to 65MHz)		-34	dBmV/Hz
Link performance			
C/N (link loss 6dB)		45	dB
Combination distortion component		-60	dBc
Power supply			
DC voltage		24	V
Operating current		50	mA
Operation environmental temperature		- 25 to 60	°C
Dimensions		14.5×3.6×3.0	cm

OPS2000 power supply

Specification	Item						Unit
	AC voltage	60	55	50	45	40	V
Dual-channels output							
	AC current	0.8	0.85	0.93	1.05	1.18	A
	Dissipation	42	42	42	42.5	43	W
Tri-channels output							
	Ac current	1.01	1.07	1.16	1.31	1.48	A
	Dissipation	53	53	53	53.5	54	W
Quad-channels output							
	AC current	1.20	1.28	1.39	1.57	1.77	A
	Dissipation	63	63	63	63.5	64	W

OPS2000 optical station functional block diagram

