

52 Series Optical Node

ONU-52 series optical node is a cost-effective amplifier designed for CATV network operator. The optical power indicator and RF test port on the module assist the operator to check the working status. Can use two hybrid for forward amplifier. Equipment with reliable switching power supply and surge protection, The 52 optical node is one additional tap or 2 split ports.

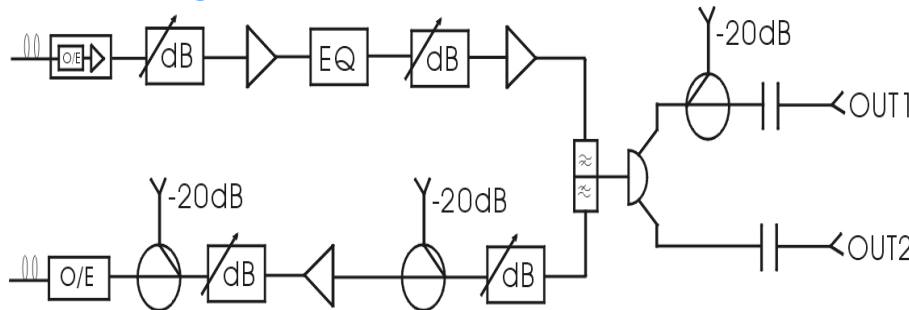
With high quality FP laser or DFB laser, the return path transmitter module set up a reliable return path optical link. User can power the ONU-52 optical receiver by 220V AC/110VAC or 60V AC.



Features:

- 1550nm/1310nm dual wavelength
- 860MHz bandwidth and RF output up to 50dBmV
- Plug-in diplexer filter, continuous adjustment 20dB EQ and attenuation
- Additional one tap output or one split output option
- -20dB test ports in forward and return module
- AC ~220V or ~60V power supply with surge and lightning protection
- Independent 60V AC Power Input Port

Function Diagram



Specifications:

Electronic parameters

NO	Item	Forward	Return	Remark
1	Frequency range (MHz)	**750/860	5-**MHz	30/46, 40/52, 65/87 optional
2	Flatness (dB)	±0.75	±0.75	
3	Reflection loss (dB)	≥16	≥16	
4	Input level (dBmV)	-	15 ~ 25	
5	Noise power rate (dB)	-	NPR≥30	
6	Equalizer (dB)	0~20	0~10	continuous adjustment
7	Test port level (dB)		-20	
8	Test port frequency response (dB)		±1	
9	Max output level (dBmV)		≥44	
10	Working voltage (V/DC)		+24	
11	Max. AC current pass (A/AC)		15	Max input current pass for 60V power supply
12	Level adjustment (dB)	0~20 or 0~10		continuous adjustment
13	Output RF Connector		-5 connector	

14	Output impedance (Ω)	75	
15	Independent return bandwidth (MHz)	5~200	
16	Power Consumption (W)	≤ 35	
17	Power Supply (V)	AC:110~265 or 35~95	Customer Select
18	Humidity	Max. 95%, non condensation	
19	C/N (dB)	≥ 51	
20	C/CSO (dB)	≥ 62	
21	C/CTB (dB)	≥ 67	
22	Environmental temperature ($^{\circ}\text{C}$)	-40~+85	
23	Dimensions (mm)	280(length) \times 200(width) \times 115(height) *including ports	
24	Weight (Kg)	Max. 2Kg	

Optical parameters:

No	Item	Parameter	Remark
Forward Path Module			
1	Input optical power range (dBm)	-8 ~ +3	
2	Suggested range (dBm)	-4 ~ +2	
3	Reflection loss (dB)	>45	
4	Wavelength range (nm)	1100 ~ 1600	
5	Connector type	FC/APC or SC/APC	Customer select
6	Fiber type	Single mode	
7	Current response	0.85A/W	1310nm
8	Optical power test voltage	1V/mW	
Return Transmitter Module			
9	Transmission optical wavelength (nm)	1310 \pm 10	
10	Optical power test voltage	1V/mW	
11	Output optical power	1 mW	
12	Connector type	FC/APC or SC/APC	Customer select
13	Laser type	FP laser or DFB laser	Customer select

Test condition:

- Forward path: input 59 channels Matrix PAL-D signal to standard optical transmitter and measure the optical receiver C/CTB, C/CSO and C/N in conditions of -1dBm optical input (10km fiber + optical attenuator) and 46dBmV RF output.