

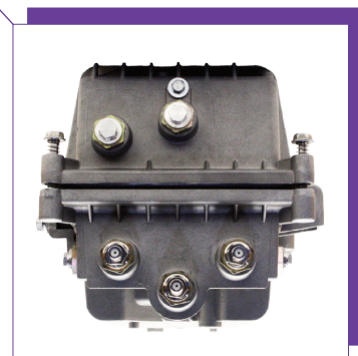
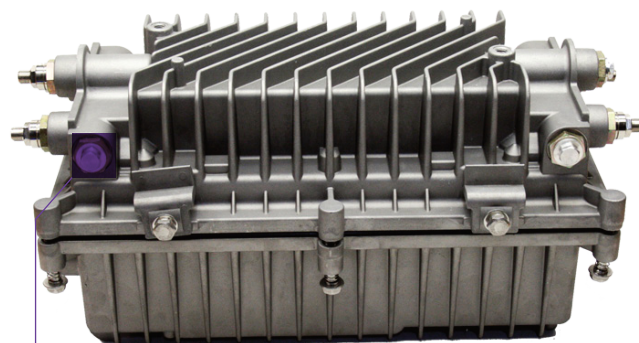
1 GHz 4 PORT OPTICAL NODE [ON-1000-x-4-x-D-R-x]

Fiber Products, Optical Nodes

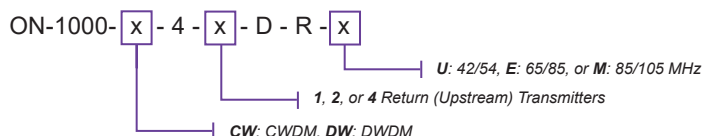
Taikan
ESTD. 1973

Features

- 4 High Level Output Ports with GaAs Power Double Amplifier Modules
- 25 A Current Capacity (Steady State) and 25 A Surge Survivability
- Surge Resistant Circuitry Ensures Gain Stage Protection without Fuses and Protection from other Failure Causing Device
- 40-90 VAC High Efficacy Switch Mode Power Supply
- Forward (Downstream) Redundancy with Two 1310 / 1550 nm Optical Receivers (Optional)
- Standard Fiber Management Tray Provides Fiber and Connector Storage for up to 6 Connector Pairs
- Select 1, 2, or 4 Return (Upstream) Path CWDM or DWDM Optical Transmitters. Standard Model has 1 Receiver and 1 Return Transmitter
- Local Test Points and LED Indicators on Optical Receivers and Transmitters that Simplify Installation and Maintenance
- Optical Node Uses Fixed Value Plug-in Attenuator and Equalizer Accessories
- Forward (Downstream) Output Test Point and Return (Upstream) Input Test Point for each Port allows for Optimum Design and Alignment



Ordering Information



DFB Advantage: Designed for high capacity return (upstream) traffic and analog video carrier transmission

Model Number	Description	Box Weight	Dimensions (LxWxH)
ON-1000-x-4-x-D-R-x	4 Port Optical Node	10 kg / 22 lbs	48 x 28 x 23 cm (18.9 x 11 x 9.1 in.)

Forward Path Optical Specifications

Optical Input Wavelength	1310 or 1550 nm
Optical Input Range	-5 to 0 dBm
Optical Return Loss	-55 dB

Forward Path RF Specifications

Forward Bandwidth (Option)	54/85/105-1000 MHz
Output Level (@ 1002 MHz, -1 dBm Optical Input)	+45 dBmV
Frequency Response	+/- 1 dB
Return Loss, Min (All RF Ports)	≥ 16 dB
Carrier to Noise Ratio @ -1 dBm	≥ 51 dB
Composite Triple Beat @ -1 dBm	≥ -65 dBc
Composite Second Order @ -1 dBm	≥ -65 dBc
Cross Modulation @ -1 dBm	≥ -65 dBc
Chrominance to Luminance Delay	< 15 nSec
Noise Figure	9 dB

Note: specifications listed above are minimum requirements using 78 NTSC channel (CW) loading from 55 to 550 MHz and digital from 550 to 1000 MHz. Digital loading is -6 dB below

Return Optical Performance

Wavelength (Options)	1470 to 1570 nm
Band Pass (Options)	5-42/65/85 MHz
Output Power	1 mW
C/N (2 NTSC Channel Loading)	> 48 dB
Optical Return Loss	-55 dB
Connector	SC/APC

Return RF Performance

Band Pass (Options)	5-42/65/85 MHz
Input Level (Max for 50% Total OMI)	-47 dBmV/Hz
Frequency Response	+/- 1 dB

General Specifications

Temperature Rating	-30 to 50 °C (-20 to 122 °F)
Humidity Rating	Up to 95% (Non-condensing)

Power Supply

External AC Adapter	45 V to 90 V	(50-60 Hz)
Power Consumption	< 92 W	DC -6 V +15 V + 24 V

Optical Accessories

ON-R

Receiver Accessory for 4 Port Optical Node



- Converts the Received Optical Signal to Broadband RF

ON-T-x

Transmitter Accessory for 4 Port Optical Node



- Converts Broadband RF Signals to Optical Signals
- Available in a DFB Laser Option

ON-ATT-xx

Attenuator Plug In for 4 Port Optical Node



- Used to Adjust the Amplifier Levels on the 4 Port Optical Node.
- Available in a 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 and 22 dB Option.

ON-EQ-xx

Equalizer Plug in for 4 Port Optical Node



- Used to Increase the Output Tilt of the Receiver and on the 4 Port Optical Node.
- Available in a 2, 4, 6, 8, 10, 12, 14, 16, 18, 20 and 22 dB Option.