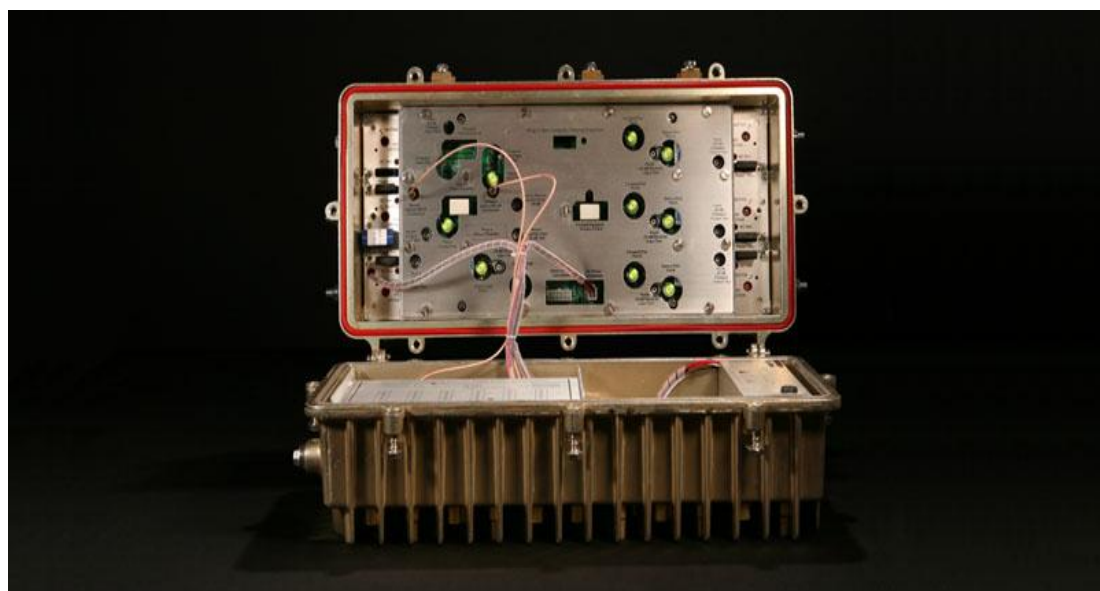




METRO NODE BON-M9940 Series



Technical Specification

PRODUCT DESCRIPTION

The Broadstar Metro Node M9940 is an 870 MHz enhanced Gallium Arsenide (E-GaAs) optical node that delivers high performance and rugged reliability. It provides four RF outputs and accommodates eight (8) modules that can be installed with 2 receivers, 4 transmitters and 2 power supplies; giving the operator both segmentation and redundancy capabilities within the same platform.

The metro node is built to meet the ever changing needs of Fiber Networks that are migrating from HFC to Fiber Deep and PON topography.

Redundant Powering Capability

Equipped with optional dual power supplies, the M9940 offers complete system redundancy. The dual module DC power supplies are located in the lid. Each DC power supply can deliver the total power required by a fully configured node: 4.3 Amperes at +24 Volts and 0.69 Amperes at +5 volts

HIGHLIGHTS:

- 870MHz E-GaAs performance
- Up to two optical receivers
- Up to three optical ret. transmitters
- SNMP compliant status monitor transponder
- 4 ports, each can be managed separately. Hi output
- User-friendly fiber management
- Optional Redundant powering capability w/ surge suppressers
- 15A power passing
- Ingress control switches
- 4 return channels can be in CWDM to utilize a single fiber.

TECHNICAL INDEX

- Downlink

Performance		Index	Supplement	
Optical feature	Operating wavelength	(nm)	1280 ~ 1610	
	Received power	(dBm)	+3 ~ -5	
	Responsibility	(A / W)	1310nm \geq 0.85 1550nm \geq 0.9	
	Optical return loss	(dB)	\geq 55	
	Optical fiber connector		SC/APC	
RF feature	Operating bandwidth	(MHz)	47~870	
	Flatness	(dB)	\leq \pm 1.0	
	Output level	(dB μ V)	112	
	Output level control	(dB)	0~18	
	Return loss	(dB)	\geq 14	47~870MHz
	Output impedance	(Ω)	75	
	Number of output port RF connector		4 F-Female	
Link feature	Test channel	CH	PAL-D/59CH	NTSC/77CH
	OMI	(%)	3.8	Pin=0dBm
	CNR	(dB)	\geq 51	
	CTB	(dB)	\leq -65	
	CSO	(dB)	\leq -60	
	HUM	(dB)	\leq -60	
General feature	Power supply	(V)	60VAC	
	Power consume	(W)	\leq 3	+12VC, 190mA
	Operating temp.	($^{\circ}$ C)	-20~+60	
	Storage temp.	($^{\circ}$ C)	-40~85	
	Operating relative humidity	(%)	5~59	
	Size	(mm)	530 \times 275 \times 220	(W) \times (D) \times (H)

- Uplink

Performance		Index	Supplement
Optical feature	Operating wavelength	(nm)	1310~1560
	Laser type		DFB
	Output power	(dBm)	1
	Optical return loss	(dB)	$>$ 55
	Optical fiber connector		SC/APC
RF feature	Operating bandwidth	(MHz)	5~65
	Input level	(dB μ V)	15~25
	Flatness	(dB)	\leq \pm 1.0
	Return loss	(dB)	\geq 16
	Impedance	(Ω)	75

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- Network management

Performance		Index	Supplement
Input frequency	(MHz)	112	108~119 optional
Output frequency	(MHz)	18	R5 frequency-band, 17.0~20.8MHz
Input level	(dBmV)	≥5	
Output level	(dBmV)	≥40	
Control output level range of downstream	(dB)	0~15	
Temperature test range	(°C)	-40~85	

- CWDM wavelength optional(return path Optical transmitter module)

ITU	ITU+1
1310nm	-
1470nm	1471nm
1490nm	1491nm
1510nm	1511nm
1530nm	1531nm
1550nm	1551nm
1570nm	1571nm
1590nm	1591nm
1610nm	1611nm

OPTICS DIAGRAM:

