# Optical Passives (ISP)

NP33MxxS0yA
*Lc*WDM™ Multiplexers

FEATURES

- Multiple models
    - 4- and 6-channel optical mux modules with cascade ports
    - 8-channel optical mux modules
- Channels defined by *Lc*WDM wavelengths
- Wide –20° to +65°C operating temperature range
- Excellent passband flatness (± 0.15 dB typical)
- High forward path directivity (50 dB typical)
- Reliable, easy to maintain SC/APC connectors
- Optional bi-directional 20 dB test port monitor
- One half-depth slot in CH3000 chassis
- Telcordia GR-1209 and GR-1221 qualified
- LGX chassis-compatible
- Replaces OP33Mxx-1
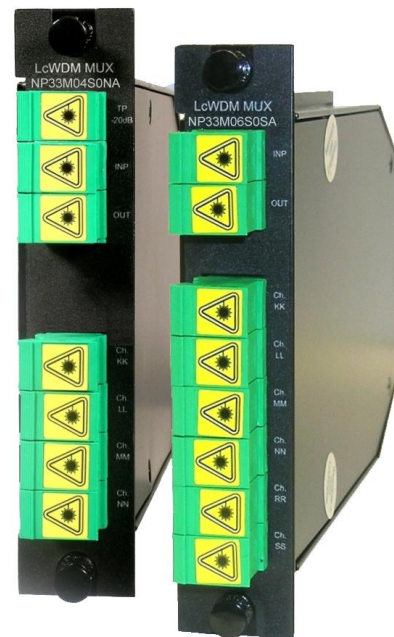
PRODUCT OVERVIEW

ARRIS NP33MxxS0yA series 4-, 6-, and 8-channel *Lc*WDM multiplexers facilitate *Lc*WDM architectures. *Lc*WDM technology can dramatically increase network capacity without requiring additional fiber be deployed for super-trunking or narrowcasting applications.

SPECIFICATIONS

Characteristics	Specification
Physical	
Dimensions	6.5" D x 5.3" H x 1.0" W (3RU) (16.5 cm x 13.5 cm x 2.5 cm)
	Note: 8-channel models NP33M08S0yA and NP33M08S1yA are double-width modules with width of 2 inches (5.1 cm).
Weight	0.8 lbs (0.4 kg)
Environmental	
Operating temperature range (indoor)	−20° to +65°C (−4° to +149°F)
Storage temperature range	−40° to +85°C (−40° to +185°F)
Humidity	5% to 95% non-condensing
Optical	
Return loss, min	45 dB
Polarization dependent loss, max (typ)	0.2 (0.1) dB
LcWDM channels	See the tables on Page 3 for the definitions of the channel designators.
Wavelength pass-through	1263.5–1357.5 nm
Power handling, max (any input port)	21.8 dBm

Insertion losses, including connectors	4-channel		6-channel	
	max	typical	max	typical
CH. xx to OUT	1.8 dB	1.6 dB	2.0 dB	1.7 dB
INP to OUT	1.5 dB	1.4 dB	1.6 dB	1.4 dB
Note: Add 0.2 dB for models with -20 dB TPs (NP33MxxS1yA)				

OUT to TP, including connectors, max	20.5 ± 0.5 dB
Directivity, min	50 dB
Optical Interface	
Optical connectors	SC/APC
Optical ports	• INP (cascade wavelengths from previous mux, not present on 8-channel module) • OUT (output to fiber network or next mux) • Ch. xx (channel add inputs for LcWDM wavelength xx) • TP −20 dB (bi-directional 1% test point)

ORDERING INFORMATION

N	P	3	3	M	0	*	S	0	*	A	*	S	–	0	L	A	–	A	S

* = Number of *Lc*WDM channels (4, 6, or 8)

* = *Lc*WDM Channel Designator:
   N for 4-channel includes channels KK, LL, MM, and NN.
   U for 4-channel includes channels RR, SS, TT, and UU.
   S for 6-channel includes channels KK, LL, MM, NN, RR, and SS.
   U for 8-channel includes channels KK, LL, MM, NN, RR, SS, TT, and UU.

* = –20 dB Test Port (0 = not present, 1 = present)

Channel Designator	Wavelength (nm)	Frequency (THz)
KK	1317.769	227.50
LL	1320.090	227.10
MM	1321.254	226.90
NN	1323.003	226.60
RR	1325.050	226.25
SS	1327.690	225.80
TT	1329.162	225.55
UU	1333.596	224.80

RELATED PRODUCTS

CH3000 chassis   PF3000

Note: Specifications are subject to change without notice.

Customer Care

Contact Customer Care for product information and sales:
- United States: 866-36-ARRIS
- International: +1-678-473-5656

Ask us about the complete Access Technologies Solutions portfolio: ISP-NP33MxxS0yA

Fiber-Deep   **DOCSIS® 3.1**   **Node Segmentation**   **HPON™/RFoG**   **FTTx**