WDM Coupler 1310 nm/1490 nm/1550 nm

The QAMnet WDM-131415 series multiplexer utilizes Wavelength Division Multiplexing (WDM) technology to separate or combine 1310 nm, 1490 nm and 1550 nm wavelength channels.



Product Description

The QAMnet WDM-131415 series multiplexer utilizes Wavelength Division Multiplexing (WDM) technology to separate or combine 1310 nm, 1490 nm and 1550 nm wavelength channels. In the standard HFC system, the 1310 nm channel is used for return path, the 1550 nm wavelength is used for forward path and the 1490 nm is typically used for GEPON signals. The WDM-131415 multiplexer features low insertion loss, high isolation, and stable temperature operation level.

WDM-131415 is available in either a rugged module housing with SC/APC connectors or unpackaged device form. The module housing is fabricated with precision machined aluminum.

Features

- · Low insertion loss
- High isolation value of 30 dB
- \bullet Combine/separate three wavelength 1550 nm, 1490 nm and 1310 nm
- Device or rugged construction module
- Operating temperature range -30°C to + 70°C

Applications

✓ HFC ✓ FTTH ✓ RFoG ✓ Deep Fiber Applications

PRODUCT SPECIFICATIONS

Optical Specifications

Configuration	1 Input / 3 Output
Center Wavelengths	1310 nm/1490 nm/1550 nm
Passband Wavelength	1490 nm ± 10 nm
Reflection Wavelength	1310 nm ± 20 nm / 1550 nm ± 20 nm
1490nm Band Insertion Loss	0.6 dB Typical Device, 1.2 dB Module
1310nm Band Insertion Loss	0.4 dB Typical Device, 1.0 dB Module
1550nm Band Insertion Loss	0.6 dB Typical Device, 1.2 dB Module
1490nm Band Isolation	≥ 35 dB
1310nm Band Isolation	≥ 25 dB
1550nm Band Isolation	≥ 20 dB
Directivity	≥ 55 dB
Return Loss	≥ 50 dB
Polarization Dependent Loss	≤ 0.10 dB
Wavelength Thermal Stability	≤ 3 pm/°C
Insertion Loss Thermal Stability	≤ 0.005 dB /°C
Power Handling	≤ 27 dBm

Mechanical Specifications

Operating Temperature Range	-10°C to +70°C
Storage Temperature Range	-40°C to +85°C
Connectors	SC/APC or customer specified
Device Dimensions	2" (L) x 0.2" ∅
Housing Dimensions	4.72" (L) × 3.55" (W) × 0.55" (H)
Fiber Patchcord	3mm, 0.5 meter length

Ordering Information

WDM-131415-x

x d (unpackaged device), m (module)