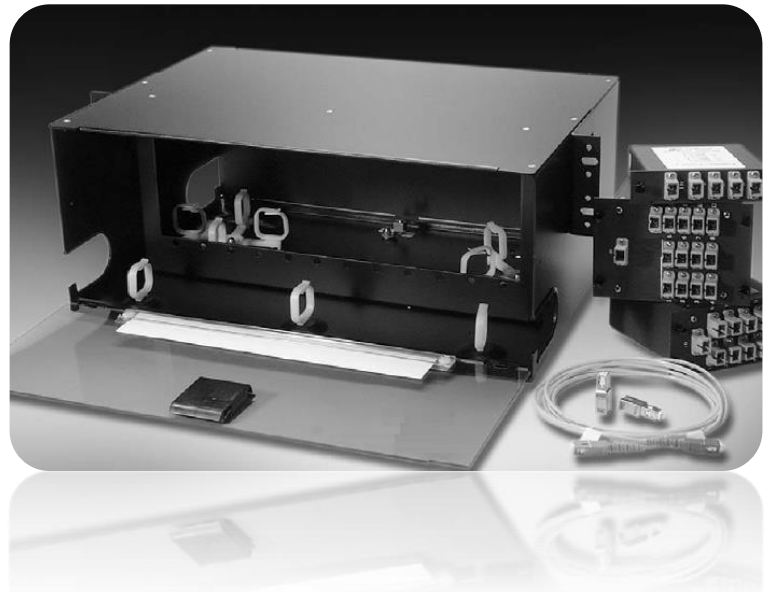


Optical Passives for HFC, FTTx & RFoG Solutions



- **Full Line of Optical Passives and Accessories**
- **WDM/CWDM/DWDM**
- **Optical Splitters**
- **Dispersion Compensation Module (DCM)**
- **ITU G.694 standard compliant**
- **Excellent Wavelength Stability**
- **Cost Effective Solution**
- **High Port Isolation**
- **Low Insertion Loss**
- **Flexibility for Customization**

ACT offers a complete line of DWDMs, CWDMs, WDMs, OADM, Couplers, DCM, Optical Shelf and Accessories. The Wavelength Division Multiplexers (WDMs) feature low insertion loss, high isolation and excellent wavelength stability.

The CWDM/DWDMs are designed to multiplex (mux) or de-multiplex (demux) optical signals in full optical spectrum with CWDM/DWDM multiple channels at an ITU standards ITU-T defined spacing. It comes as different form factor packages, 1RU 19" rack-mount chassis, standard LGX modules or flat box assemblies.

ACT also developed special range of WDM units which are suitable for HFC, FTTx (P2P, P2MP), RFoG (Radio Frequency over Glass) applications, permitting DOCSIS and HFC to operate over a EPON/GPON compliant Passive Optical Network (PON) as commonly deployed for Fibre to the Home (FTTH) developments solution in high density FTTX networks to bring the video services to business and home premises.

Key Features

- Cost-effective Full Line of Optical Passives and Accessories
- WDM/CWDM/DWDM/OADM, Optical Coupler, Attenuator etc.
- ITU G.694 standard compliant
- Excellent Wavelength Stability
- High Port Isolation, low Insertion Loss
- Customization option available
- SC/APC, LC/APC, FC/APC and E2000/APC connectors available.
- Optional 1311 nm port for forward path transmission to HFC nodes
- Either single port or with internal splitter to match number of CWDM ports for feeding multiple HFC nodes over one fibre
- Options for assembly into 19" sub-racks, LGX chassis, or flat box, ready for deployment.

Sample 1RU WDM Block Diagram (P2P with Video Overlay)

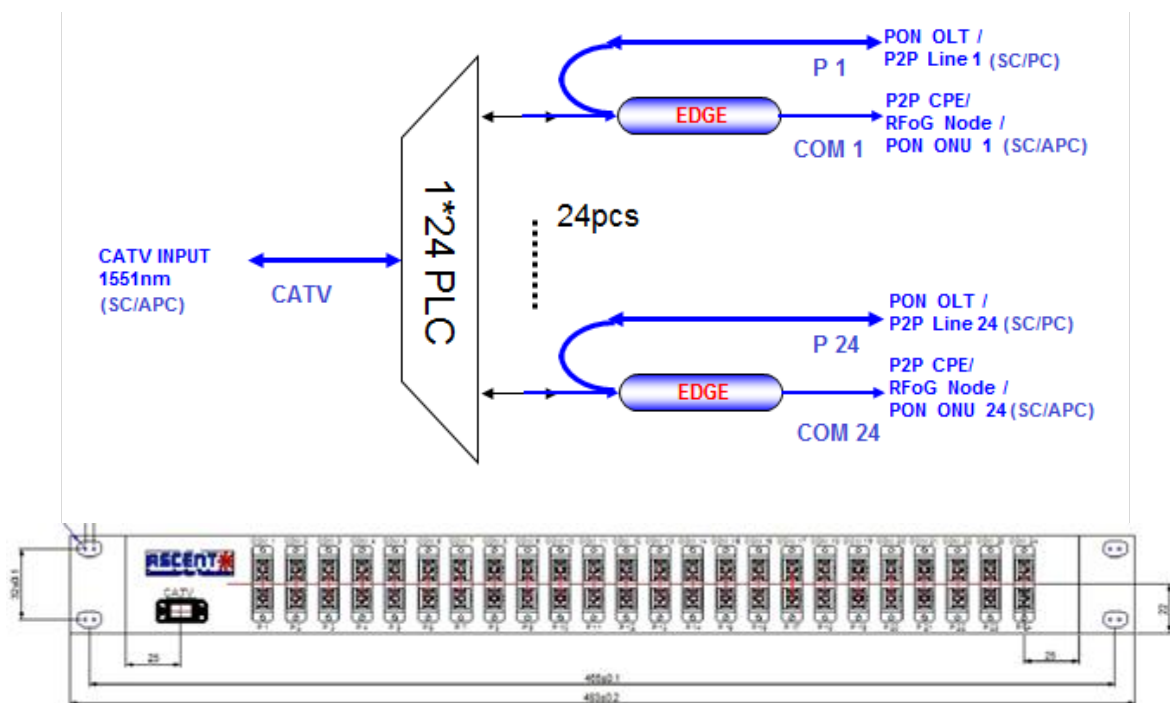


Figure 1. Coarse wavelength division multiplexer for 1551 nm CATV overlay in P2P Active Ethernet applications. 24-port CATV RF overlay splitter with 24 x P2P Active Ethernet ports.

CWDM Specifications

ACT Optical Passives CWDM, (AOPC)

Optical Specification

Centre wavelength	1271, 1291, 1311, 1331, 1351, 1371, 1431, 1451, 1471, 1491, 1511, 1531, 1551, 1571, 1591, 1611 nm
Channel spacing	20 nm
Channels	16
Channel pass band	CW±7.5nm
Insertion Loss 16 ch	5.2 dB Max (Paired 7.0 dB Max)
Adjacent channel isolation	≥ 30 dB
Non-adjacent channel isolation	≥ 40 dB
Directivity	≥ 50 dB
Return loss	≥ 45 dB

General Specifications

Operating Temp, °C	-40 to 85
Storage Temp, °C	-40 to 85
Operating relative humidity, %	5 to 95
Dimensions (W x D x H)	Various by model 1RU: 19 inches Rack Unit LGX : industry standard Flat Box: 100×80×10.5 mm(<=8 output ports), or 140×115×18 mm (>8 output ports)
Weight, kg	Note
Ship weight	Note

Note: Contact ACT for different packaging options. Weight will vary depending on model.

Losses excluding connector Loss (a pair of connector loss max: 0.5dB)

Ordering Information

Contact ACT for the complete CWDM/DWDM/WDM/Optical Splitter offerings and other accessories.

Sample Configuration:

AOPC-16M-R-3-27-0-T-1-P

Optical MUX; Technology:CWDM; Number of Wavelengths:16; Pack:1RU Enclosure (-40° to +85°C); Channel Spacing:20nm; ITU Plan or Starting Wavelength (Channel):1270nm; Upgrade Port Options:No Upgrade; Insertion Loss:Tilt; Conn:SC/APC, Premier Grade

AOPC-16D-R-3-27-0-T-1-P

Optical DEMUX; Technology:CWDM; Number of Wavelengths:16; Pack:1RU Enclosure (-40° to +85°C); Channel Spacing:20nm; ITU Plan or Starting Wavelength (Channel):1270nm; Upgrade Port Options:No Upgrade; Insertion Loss:Tilt; Conn:SC/APC, Premier Grade

Contact Information



Ascent Communication Technology Ltd

AUSTRALIA

140 William Street, Melbourne
Victoria 3000, AUSTRALIA
Phone: +61-3-8691 2902

CHINA

Unit 1933, 600 Luban Road
200023, Shanghai CHINA
Phone: +86-21-60232616

EUROPE

Pfarrer-Bensheimer-Strasse 7a
55129 Mainz, GERMANY
Phone: +49 (0) 6136 926 3246

HONG KONG SAR

Unit 9, 12th Floor, Wing Tuck Commercial Centre
177 Wing Lok Street, Sheung Wan, HONG KONG
Phone: +852-2851 4722

USA

2710 Thomes Ave
Cheyenne, WY 82001, USA
Phone: +1-203 816 5188

VIETNAM

15 /F TTC Building, Duy Tan Street
Cau Giay Dist., Hanoi, VIETNAM
Phone: +84 243 795 5917

WEB: www.ascentcomtec.com

EMAIL: sales@ascentcomtec.com

Specifications and product availability are subject to change without notice.
Copyright © 2015 Ascent Communication Technology Limited. All rights reserved.
Ver. ACT_Optical_Passive_16_Ch_CWDM_Datasheet_V1g_Oct_2015