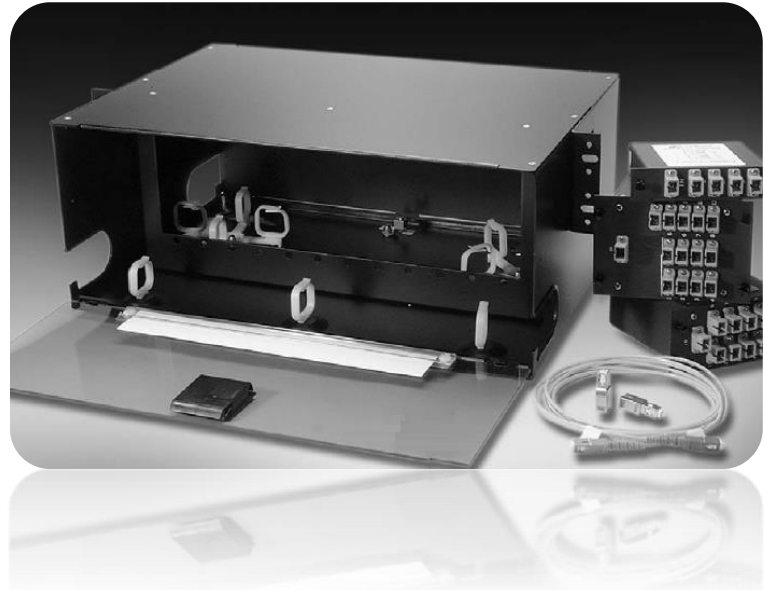


## Optical Passives for HFC & FTTH PON Solutions

---



- **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 complete range of Wavelength Division Multiplexers (WDM) units which are suitable for HFC, FTTH (P2P, P2MP), RFOG (RF over Glass) applications. The specially packaged WDM device allows Analog Video signals to operate over a EPON/GPON compliant Passive Optical Network (PON) as commonly deployed for Fibre to the Home (FTTH) development. The PON WDM solution is widely used in high density FTTH networks to bring the video services to business and home premises.

ACT also provides line of DWDMs, CWDMs, WDMs, OADMs, Couplers, DCM, Optical Shelf and Accessories. The 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.

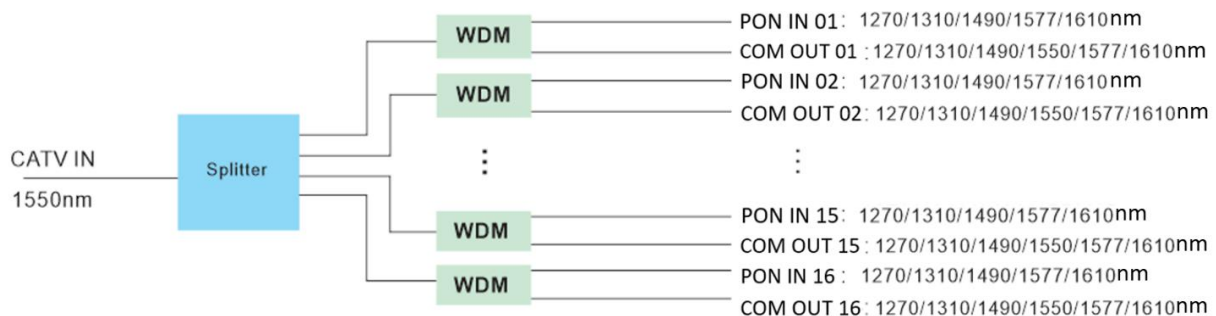
## Specifications

### 19" Rack Mount Optical Splitter with WDM

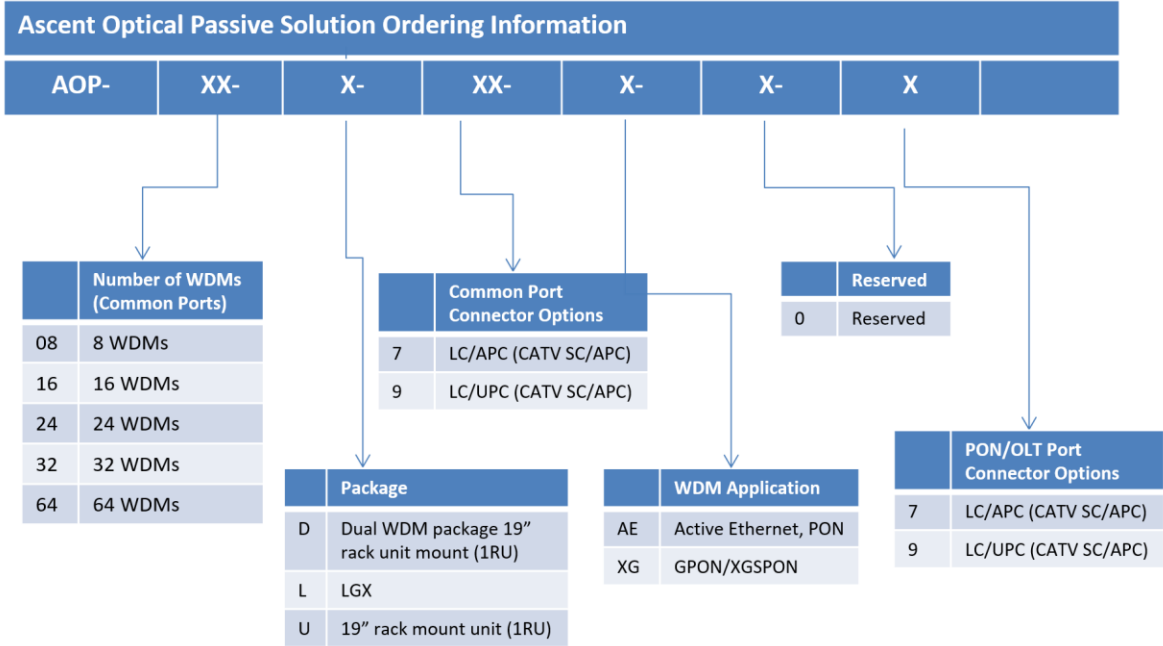
Item	Unit	Description
<b>Operation Wavelength</b>		
Common	nm	1260 to 1620
CATV Band	nm	1540 to 1560
Reflect Band (PON)	nm	1260 to 1360, 1480 to 1500, and 1575 to 1620
Channels (PON +COM)		1-way    8-way    16-way    24-way    32-way    64-way
<b>Typical Insertion Loss</b>		
CATV -COM	dB	1.0    11.8    15.2    17.5    18.4    21.4
COM-PON	dB	1.0    1.0    1.0    1.0    1.0    1.0
Uniformity	dB	1.9    1.9    1.9    1.9    1.9    2
Polarization Dependent Loss	dB	≤0.5
RF Bandwidth	MHz	47 to 1003
<b>Adjacent Channel Isolation</b>		
CATV -COM	dB	≥30
PON-COM	dB	≥15
Return Loss / Directivity	dB	≥50
Operating Temperature	°C	-10 to +70
Storage Temperature	°C	-40 to +85
Operating Relative Humidity	%	5 to 95
Package Dimensions (H×W×D)	mm	19" 1U rack (44 × 483 × 250)
Fiber Type		SMF-28e
Dimensions (W×D×H)	mm	1RU: 470 × 225 × 44 2RU: 470 × 225 × 88
<b>Typical Connector Type</b>		
CATV		SC APC (LC/APC)
PON		LC APC (MPO/APC)
COM		LC APC (SC/APC)

**Note:** Above specifications are for devices without connectors.

## Block Diagram



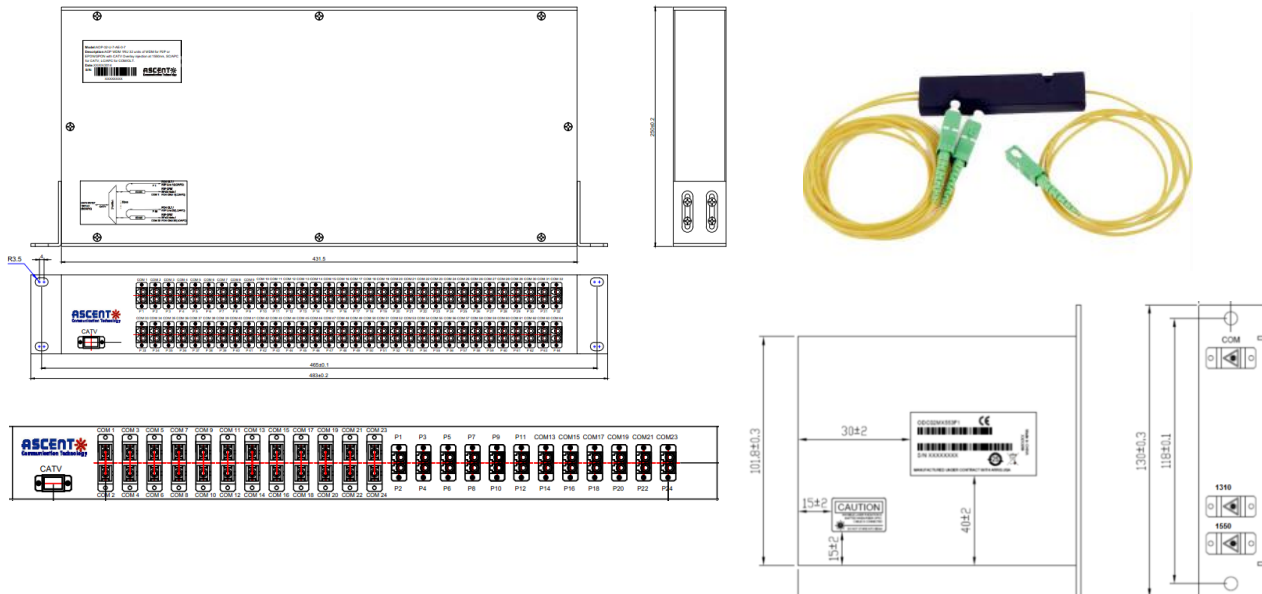
## Ordering Information



Sample Configuration (Contact ACT for complete line of configs):

**AOP-16-U-7-XG-0-7**

AOP WDM 16 units of WDM for P2P or XGSPON with CATV Overlay injection at 1550nm, SC/APC for CATV, LC/APC for COM/OLT



## Contact Information



### Ascent Communication Technology Ltd

#### AUSTRALIA

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

#### Hong Kong SAR

Room 1210, 12th Floor, Wing Tuck Commercial Centre  
181 Wing Lok Street, Sheung Wan , Hong Kong SAR  
Phone: +852-2851 4722

#### CHINA

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

#### USA

2710 Thomes Ave  
Cheyenne, WY 82001, USA  
Phone: +1 203 350 9822

#### EUROPE

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

#### VIETNAM

11th Floor, Hoa Binh Office Tower  
106 Hoang Quoc Viet Street, Nghia Do Ward  
Cau Giay District, Hanoi 10649, VIETNAM  
Phone: +84-24-37955917

**WEB:** [www.ascentcomtec.com](http://www.ascentcomtec.com)

**EMAIL:** [sales@ascentcomtec.com](mailto:sales@ascentcomtec.com)

Specifications and product availability are subject to change without notice.  
Copyright © 2025 Ascent Communication Technology Limited. All rights reserved.  
Ver. ACT\_AOP-16-U-7-XG-0-7\_Datasheet\_V1b\_Nov\_2025