

# AOS-S-1-2 Optical TAP Splitter

**User Guide** 



# AOS-S-1-2 Optical TAP/Splitter

# **User Guide**

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This document is produced to assist professional and properly trained personnel with installation and maintenance issues for the product. The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice.

For more information, contact ACT: <a href="mailto:sales@ascentcomtec.com">sales@ascentcomtec.com</a>

# **Revision History**

Revision	Date	Reason for Change
А	6/22/2016	Initial Release



# **Overview**

Congratulations on your purchase of the 19" 1RU frame, AOS optical passive splitter. This manual contains information that will assist you in installing and operating the product.

ACT offers a complete line of DWDMs, CWDMs, WDMs, OADMs, 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.

24 Splitter/TAP chassis (Support 1/10/100 GE) is a 1RU device with modular design to fit up to 24 1x2 splitter/taps for convenient optical signal monitoring.



Fig. 1: AOS-S Front





Fig. 3: AOS-S Rear Top

Fig. 4: AOS-S Rear



# **Product Specification**

# 24 Splitter/TAP chassis (Support 1/10/100 GE)

ACT Optical Passives Optical Splitters (AOS)

Optical Specification	
Centre wavelength	1260 nm to 1350 & 1460 to 1620 nm
Configuration	1x2
Channel pass band	1300~1320 & 1540~1560nm
Insertion Loss	2.5/6.6 (70/30 Split )
Directivity	≥ 50 dB
Polarization Dependent Loss	<=0.1dB
Return loss	≥ 55 dB
Connectors	SC/APC, SC/PC, LC/APC, LC/UPC
Fiber Types	900um, 2mm, or 3mm
General Specifications	
Operating Temp, °C	-10 to 70
Storage Temp, °C	-40 to 85
Operating relative humidity, %	5 to 95
Dimensions (W x D x H)	1RU
Weight, kg	Weight varies depending on model.

Note: Contact ACT for different packaging options. Losses excluding connector Loss (a pair of connector loss max: 0.4dB)

# Drawing Diagram: ACT Optical Passive Shelf 1RU 3x8 Splitter/TAP with LC/PC connector:







# Drawing Diagram: ACT Optical Passive TAP Module - 8 of 1x2 Splitter/TAP with LC/PC connector:



# Installation

[Note] The installation steps hereafter are explained by using of AOS-S and duplex LC patch cord.

AOS-S is designed for single mode fiber distribution. Do not connect it by multi- mode fiber.

Step 1

Plug optical passive splitter, AOS-S to any slots of 1RU chassis and fasten it by thumb screw.



Fig. 5: Plug & Fasten of AOS-S Module



#### Fig. 6: Front Panel

\* Refer to the following configuration of optical passive splitter, AOS-S.

x: The number of input fibers (IN 1, IN 2.... IN8)

y: The number of output fibers (OUT 1, OUT 2.... OUT8)

z: Monitoring Port (LC connector)

AOP-SPL-CH3-1RU AOS-S-1-2-M8-5XXXXXX-8 AOP Optical SPLITTER/TAP Chassis 1RU, 19 inches wide, 3 TAP module slots AOP Optical SPLITTER/TAP Module with 8 optical splitters, Standard 1x2, 1310/1550nm, Coupling Ratio = 70/30, LC Connector



# Step 2

Take three (3) caps out of the receptacle of Input port (IN1), Output port (OUT1) and TAP/Monitor port (MON1).



Connect LC patch cord into input, output and monitoring receptacle: Input port (IN1), Output port (OUT1) and TAP/Monitor port (MON1).



Fig. 7: Connect LC patch cord into input, output and monitoring receptacle

# Step 3

Connect the other side of the patch cord to the equipment end

# Step 4

Test the signal from the monitoring port.



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