

# **HEADEND OPTICS PLATFORM (CH3000)**

**FA3530M, FA3533M  
HIGH PERFORMANCE, MULTI-PORT,  
OPTICAL AMPLIFIERS**



## **FEATURES**

- High-power, multiport EDFAs for RFoG and RFPON applications
- Two models:
  - FA3530M: Up to 21 dBm output power to each of 8 ports
  - FA3533M: Up to 21 dBm output power to each of 16 ports
- Front panel laser On/Off interlock switch
- Hot plug-in/out
- Local and remote status monitoring and control



FA3533M-16-00-AL

## **PRODUCT OVERVIEW**

The ARRIS FA3530M and FA3533M are high performance, multiport 1550 nm optical amplifiers. The high power output of these amplifiers is ideally suited for video distribution in RFoG and RFPON network architectures.

In RFoG applications, the 8-port FA3530M EDFA at the headend amplifies and distributes the 1550 nm broadcast video signal to over 250 residential customers, over 8 typical RFoG network segments, each with 32 connected endpoint devices. Comparably, the 16-port FA3533M amplifies and distributes the 1550 nm broadcast signal to over 500 customers over 16 typical RFoG network segments, each with 32 connected endpoint devices.

The compact multiport modules are installed and managed side by side in the same chassis as other required equipment. The FA3530M can connect directly to two of the ARRIS OR3144H RFoG Diplexer/Return Receiver modules (while the FA3533M can support up to four of the same modules) to complete your RFoG solution. These modules can also be used with the AR3044H Receiver and the appropriate RFoG filter optical passive. This greatly simplifies the management of headend and hub deployments for RFoG, RFPON, and FTTH networks.

## SPECIFICATIONS

Characteristics	Specification		
<b>Physical</b>			
Dimensions (without connectors)			
Three-slot wide versions of FA3530M and FA3533M	13.0" D x 4.3" H x 3.0" W (3RU) (33 cm x 11 cm x 7.5 cm)		
Four-slot wide version FA3533M	13.0" D x 4.3" H x 4.0" W (4RU) (33 cm x 11 cm x 10.2 cm)		
Weight	5.0 lbs (2.3 kg)		
<b>Environmental</b>			
Operating temperature range	0° to +50°C (32° to 122°F)		
Storage temperature range	-40° to +85°C (-40° to 185°F)		
Humidity	5% to 95% non-condensing		
<b>General</b>			
Hot plug-in/out			
Modes of operation	constant current		
Output power alignment	manual		
<b>Optical Interface</b>			
Optical connector			
Three-slot wide versions of FA3530M and FA3533M	LC/APC (at Back Plate BP-F14 for FA3530M or BP-F12 for FA3533M)		
Four-slot wide version FA3533M	SC/APC (at Back Plate BP-F10 for FA3533M)		
<b>Optical</b>			
Input signal wavelength	1540–1565 nm		
Input power range	-10 to +10 dBm		
Optical signal path isolation	> 30 dB		
Output power stability	± 0.3 dB		
Output power adjustment range	-3.0 dB (from nominal output power, min)		
<b>Performance Parameters</b>			
	Power		
Model Number	Output Power, nominal (dBm)	Consumption, max (Watts)	Noise Figure, max <sup>1</sup> (dB)
FA3530M	8x21	40	6.5
FA3533M	16x21	60 <sup>2</sup>	6.5

### NOTES:

1. Measured optically at 0 dBm input,  $\lambda = 1550$  nm in vacuum,  $T_A = 25^\circ\text{C}$
2. Older FA3533M revisions (rev K or earlier): 80 W max

## RELATED PRODUCTS

CH3000 Chassis	Optical Patch Cords
Optical Transmitters	OR3144H
AR3044H	Installation Services

**ORDERING INFORMATION**



Multiport Fiber Amplifier (EDFA)

8 Ports

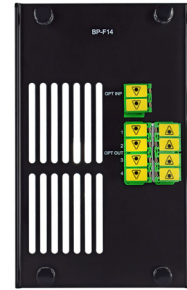
Reserved Fields

AL = LC/APC Connectors

**Required Module Back Plate**



(Included with FA3530M-08-00-AL module)



Multiport Fiber Amplifier (EDFA)

16 Ports

Reserved Fields

\* AS = 4-slot wide version, SC/APC Connectors,

\* AL= 3-slot wide version, LC/APC Connectors

**Required Module Back Plates**



(Included with FA3533M-16-00-AS module)



(Included with FA3533M-16-00-AL module)



**Note:** Specifications are subject to change without notice.

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