

#### HOA 7100 and 7300 Series

# **Single Wavelength Optical Amplifier**

 Low noise figure and high output power Erbium Doped Fiber Amplifiers (EDFA) optimized for CATV networks

- Excellent for long distance transport with minimal signal degradation
- Convenient, stand-alone, rack-mount form factor
- Embedded SNMP agent (v1, v2c, v3)
- Support of SCTE HMC MIBs
- Embedded Web (HTTP) server for userfriendly graphical interface

Harmonic's HOA 7100 and HOA 7300 series optical amplifiers are optimized for single wavelength operation and are ideal for long haul transport. Harmonic's MAXLink™ and SUPRALink™ transmission systems include transmitters and optical amplifiers designed for 1550 nm-based applications. Both systems provide a cost-effective solution for a variety of applications and architectures, including long haul applications that are beyond the reach of 1310 nm transmitters and fiber dense architectures that take advantage of high power optical amplifiers. In addition, this system is ideally suited for new, evolving transport architectures such as redundant rings, broadcast layer transmission, and hub interconnects used in broadband networks.

Six models are available: +14, +17, +20, and 26 dBm total output power, the first two with and without an input optical isolator. The input isolator minimizes noise in networks with long fiber runs while the models without isolators offer slightly better noise figure. The HOA7320 has a single output port with +20 dBm output power while the HOA7326 features four ports each with +20 dBm output for a total of +26 dBm.

Full monitoring and configuration are available through the embedded SNMP agent and HTTP server.

# **OPTICAL**

Operating Wavelength Range HOA 7114 and HOA 7114i HOA 7117 and HOA 7117i HOA 7320 HOA7326	1540 to 1564 nm 1540 to 1564 nm 1535 to 1565 nm 1540 to 1565 nm
Input Power Range	-5 to +10 dBm
Number of Ports HOA 7114, HOA 7114i, HOA 7117, HOA 7117i, and HOA7320 HOA7326	1 4
Output Power per port HOA 7114 and HOA 7114i HOA 7117 and HOA 7117i HOA7320¹ HOA7326	+14 dBm (25 mW) +17 dBm (50 mW) +20 dBm (100 mW) 20 dBm typical
Optical Power Adjustment Range HOA 7114 and HOA 7114i HOA 7117 and HOA 7117i HOA7320 and HOA7326	3 dB down from maximum 3 dB down from maximum 4 dB down from maximum
Input isolator HOA7114 and HOA 7117 HOA7114i and HOA 7117i HOA7320 and HOA7326	No Yes Yes
Noise Figure <sup>2</sup> HOA 7114 and HOA 7117 HOA 7114i HOA 7117i HOA7320 HOA7326	< 4.3 dB < 4.7 dB < 4.8 dB < 4.5 dB < 5.0 dB typical, <6.0 dB Maximum
Optical Return Loss <sup>3</sup> HOA 7114 and HOA 7114i HOA 7117 and HOA 7117i HOA7320 and HOA7326 Polarization Sensitivity	> 40 dB > 40 dB > 50 dB < 0.5 dB
Laser Shutdown HOA 7114, HOA 7114i, HOA 7117, and HOA 7117i HOA7320	Interlock on fiber tray Switch on rear panel
Connector Type	SC/APC or E2000

# **POWERING**

AC Version	110/220 V	
	50/60 Hz	
DC Version	-48 V	
Consumption		
HOA 7114, HOA 7114i, HOA 7117,		
and HOA 7117i	60 W maximum	
HOA7320 and HOA7326	75 W maximum	

# **USER INTERFACE**

Front Panel HOA 7114, HOA 7114i, HOA 7117, and HOA 7117i	Full numeric keypad and multi-line alphanumeric display
HOA7320 and HOA7326	LED indicators Power (green) Status (green/red) Laser output enabled (green) Laser on (green)
Optical Monitor Point HOA 7114, HOA 7114i, HOA 7117, and HOA 7117i HOA7320 HOA7326	-16 dB relative to optical output, on front panel Power Level -3 to 0 dBm Power Level -2 to +2 dBm
Rear Panel HOA 7114, HOA 7114i, HOA 7117, and HOA 7117i	Power connector Fiber tray
HOA 7320	Power connector Laser enabled/off switch Low optical power mode manual switch
HOA7326	LED Laser output enabled Power connector

# **NETWORK MANAGEMENT**

SNMP Protocol	v1, v2c, v3
HTTP Protocol	HTTP 1.1 (with Web
	browser-based authentication)



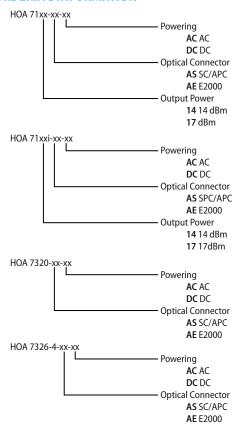
# **ENVIRONMENTAL**

Operating Temperature Range	
HOA 7114, HOA 7114i,	
HOA 7117, and HOA 7117i	-4° to +140° F (-20° to +60° C)
HOA 7320 and HOA 7326	32° to 122° F (0° to +50° C)
Storage Temperature Range	40° to +158° F (-40° to +70° C)
Maximum Relative Humidity	85%, non-condensing

#### **PHYSICAL**

Dimensions (W x H x D) HOA 7114, HOA 7114i, HOA 7117, and HOA 7117i	19.0" x 1.7" x 11.0" (1-RU) 48.3 cm x 4.3 cm x 28.0 cm
HOA 7320 and HOA 7326	19.0" x 3.4" x 12.0" (2-RU) 48.2 cm x 8.6 cm x 30.5 cm
<b>Weight</b> HOA 7114, HOA 7114i, HOA 7117, and HOA 7117i	15.4 lbs / 7.0 kg
HOA 7320 and HOA7326	20 lbs / 9.2 kg

# **ORDERING INFORMATION**



#### Notes

- 1. 1550-1560 nm
- 2. At 0 dBm optical input
- 3. Amplifier off, output only

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