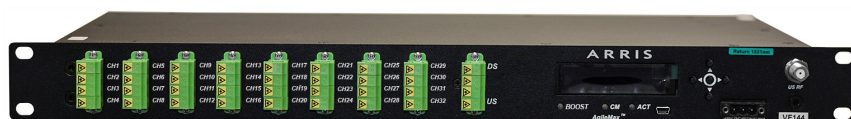


## FEATURES

- High-power internal EDFA
- -48 Vdc option for network powering; 60/90 VAC line powering
- Multiple CWDM upstream wavelengths support R-ONUs for seamless integration with existing headend and customer premise equipment
- Multiple CWDM upstream transmitter wavelength options for re-transmission to headend or hub
- Upstream RF test point
- Eliminates Optical Beat Interference (OBI) from RFoG networks, allowing operators to deploy high capacity, FTTH networks that leverage the DOCSIS® infrastructure
- Enables DOCSIS 3.0 upstream network capability
- Expands network reach and adds capability for higher split ratios in the optical network

The CommScope AgileMax® is an exciting new breakthrough in RF-over-Glass (RFoG) FTTH network technology. Replacing the optical splitters commonly found in traditional RFoG architectures, next-generation AgileMax optical distribution technology allows operators to completely eliminate Optical Beat Interference (OBI) from their networks—even in networks with multiple, active upstream lasers. By eliminating OBI, operators can significantly expand their networks' upstream and downstream capacity and data speed without changing back-office infrastructure. As a result, AgileMax deployments overcome the cost, scalability, and capacity restrictions that limit RFoG performance, while greatly reducing operational complexity in these networks.



The AgileMax AM3223D features an internal, high-power EDFA that overcomes the splitter losses needed for distributed architecture FTTH designs, while also supporting additional passive splitters in the field that may be used in conjunction with CommScope OBI-free ONUs. In addition, the AM3223D supports a wider operating range for upstream input levels than conventional passive splitters. The AM3223D also enables the use of R-ONUs with alternative CWDM wavelengths, excluding the 1550 nm band which is used by the AM3223D for the downstream path. A dedicated CWDM return transmitter, available with multiple wavelength options, provides the return link back to the headend or hub, enabling several AgileMax modules to share a common return fiber. The user variable level control enables operators to set the return transmission OMI to optimize return performance over a wide optical input range from the individual R-ONUs.

### Future-Proof Current Networks

Current solutions for mitigating the effects of OBI in the network typically rely on techniques such as limiting simultaneous upstream transmissions via the use of only a single upstream channel, utilizing CMTS scheduling algorithms in DOCSIS 3.0, or utilizing wavelength management techniques in the RFOG ONU. These techniques limit network capacity and add cost and complexity to RFOG deployments.

As operators migrate to higher-capacity DOCSIS 3.0 networks, they will need a way to eliminate OBI without compromising network performance. AgileMax meets this need by enabling full DOCSIS 3.0 support, allowing operators to expand the efficiency of their fiber infrastructure.

### Long Reach, Large Splits

The AgileMax solution provides the flexibility to expand optical reach and split ratios, allowing operators to more easily deploy new FTTH networks as needed to support growing customer demand. AgileMax network deployments also can easily achieve twice the reach of traditional RFOG. Using AgileMax instead of passive splitters, combined with the use of multiple CWDM return wavelengths, enables operators to support up to 256 R-ONUs with a single AgileMax with absolutely no OBI in the upstream.

## SPECIFICATIONS

Characteristics	Specification
<b>Physical</b>	
Dimensions	1.72 in H x 19.00 in W x 10.20 in D (4.37 x 48.26 x 25.91 cm)
Weight	8.5 lbs (3.86 kg)
<b>Environmental</b>	
Normal Operating Temperature Range	-40° to +122°F (-40° to +50°C) environment
Extended Operating Temperature Range	-59.8° to +140°F (51°C to +60°C) environment can be supported by adding 1RU rack space above and below AM3223D
Operating/Storage Humidity Range	5% to 90%, non-condensing
<b>General</b>	
Optical Connectors	LC/APC options
Number of Subscriber Ports	32
Operating Wavelength, Downstream	1551 nm ± 7.5 nm
Operating Wavelength, Upstream	CWDM band 1271–1611 nm, excluding 1551 nm ± 10 nm
Output Power, Downstream	+6 dBm (nominal)
Upstream Optical Input Level (Distribution Ports)	-10 to +3 dBm
Downstream Optical Input Level	-5 to +6 dBm
RF Test Point	20 dBmV <sup>3</sup>
Upstream Transmitter	
Output Power	3 dBm
Wavelength	1511, 1531, 1591, or 1611 nm, selected by model number <sup>1</sup>
Upstream TX Mode Select	Constant transmit or Burst Mode <sup>2</sup>
PON Wavelength Compatibility	Not Supported
<b>Power Requirements</b>	
Input Voltage Range, -48 Vdc Units	-22 to -60 Vdc
Maximum Input Current, -48 Vdc Units (@ -22 Vdc)	0.63 A
Power Consumption, -48 Vdc Units (Maximum)	15 W

#### NOTES:

- 1471 nm, 1491 nm, 1551 nm, and 1571 nm return lasers are available when ordering a minimum quantity of AM3223D units.
- Via front panel switch
- With 27 dBmV/ch input at a CommScope ONU input. Adjustable from the front panel from 22 dBmV to 7 dBmV.

## ORDERING INFORMATION

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>		<b>9</b>	<b>10</b>	<b>11</b>		<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>	<b>18</b>
A	M	3	2	2	3	D	—	C	N	N	—	N	1	N	N	F	S

<b>1 – 2</b>	<b>Module Type</b> Rack Mount	<b>13</b>	<b>Future</b> N — None
<b>3 – 4</b>	<b>Optical Split Ports</b> 32	<b>14</b>	<b>Package</b> 1 — 1RU
<b>5 – 6</b>	<b>EDFA Power (dBm)</b> 23 — 23 dBm internal EDFA	<b>15</b>	<b>Dedicated Upstream Port</b> Y — Yes
<b>7</b>	<b>Upstream Receiver Port</b> D — 1370-1610 nm (excludes 1550 nm)	<b>16</b>	<b>Future 2</b> N — None
<b>9</b>	<b>Return Laser Type<sup>1</sup></b> A — 1611 nm D — 1591 nm G — 1531 nm H — 1511 nm	<b>17</b>	<b>Powering</b> D — -48 Vdc
<b>10</b>	<b>Additional Ports</b> N — None	<b>18</b>	<b>Optical Connectors</b> L — LC/APC
<b>11</b>	<b>Local PON Injection Port</b> N — None		

**NOTE:**

1. 1471 nm, 1491 nm, 1551 nm, and 1571 nm return lasers are available when ordering a minimum quantity of AM3223D units.

## RELATED PRODUCTS

CHP CORWave® 3 Transmitters	CP8xxxx RFOG ONUs
CHP EDFAs	HT3545 Transmitters
CH3000	Installation Services

Contact Customer Care for product information and sales:

- United States: 866-36-ARRIS
- International: +1-678-473-5656



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

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