

## FEATURES

- Segmentable 2x16 downstream capability
- -48 Vdc and +24 Vdc options for network powering; 110/220 Vac Mains option for outlet powering
- Supports R-ONUs with multiple CWDM upstream wavelength, integrating seamlessly with existing headend and customer premise equipment
- Available with multiple CWDM upstream transmitter wavelengths for re-transmission to headend or hub
- Optical downstream test points, 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 AM3200D provides segmentation capability in the downstream to scale back from 32 port segments to 16 port segments with two 1x16 internal splitters. The AM3200D supports a much wider operating range for the upstream input levels and enables the use of R-ONUs with alternative CWDM wavelengths, excluding the 1550 nm band used for the downstream. A dedicated CWDM Return transmitter available with multiple wavelengths 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 the return transmission OMI to be set to optimize return performance over the 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>	
Operating Temperature Range	-40° to +140°F (-40° to +60°C)
Operating/Storage Humidity Range	5% to 90%, non-condensing
<b>General</b>	
Optical Connectors	SC/APC or LC/APC options
Number of Subscriber Ports	32 (2 groups of 16)
Operating Wavelength, Downstream	1551 nm ± 7.5 nm
Operating Wavelength, Upstream	CWDM band 1271–1611 nm, excluding 1551 nm ± 10 nm
Insertion Loss, Downstream (two 1x16 splitters)	< 15 dB (two independent 1x16 units)
Insertion Loss Uniformity, Downstream	± 1.0 dB
Upstream Optical Input Level (Distribution Ports)	-10 to +3 dBm
Optical Test Point (Downstream)	-20 dB reference to each optical input
RF Test Point	22 dBmV <sup>2</sup>
Upstream Transmitter	
Output Power	3 dBm
Wavelength	1471, 1491, 1511, 1531, 1551, 1571, 1591, or 1611 nm, selected by model number
Upstream TX Mode Select	Constant transmit or Burst Mode <sup>1</sup>
PON Wavelength Compatibility	Not Supported
<b>Power Requirements</b>	
Input Voltage Range, -48 Vdc Units	-22 to -60 Vdc
Input Voltage Range, +24 Vdc/Mains Units	+22 to +29 Vdc
Power Consumption, -48 Vdc Units (Maximum)	9 watts
Power Consumption, +24 Vdc/Mains Units (Maximum)	6.8 watts
Maximum Input Current, -48 Vdc Units (@ -22 Vdc)	0.4 A
Maximum Input Current, +24 Vdc/Mains Units (@ 22 Vdc)	0.3 A

#### NOTES:

1. Via front panel switch
2. 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	0	0	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> 00 — no 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</b> A — 1611 nm B — 1471 nm C — 1491 nm D — 1591 nm E — 1571 nm F — 1551 nm G — 1531 nm H — 1511 nm	<b>17</b>	<b>Powering</b> D — -48 Vdc F — +24 Vdc M — Mains (110/220 Vac)
<b>10</b>	<b>Additional Ports</b> 2 — 2x16 Forward Input	<b>18</b>	<b>Optical Connectors</b> S — SC/APC L — LC/APC
<b>11</b>	<b>Local PON Injection Port</b> N — None		

## 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

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