AgileMax® 1RU

AM3200D CWDM

Complete OBI Elimination HPON™ Distribution Solution

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 existing DOCSIS® infrastructure
- Enables DOCSIS 3.0 and DOCSIS 3.1 upstream and downstream network capability
- Expands network reach and adds capability for higher split ratios in the optical network

PRODUCT OVERVIEW

The ARRIS 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 HPON™ powered by 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 1550nm 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

As operators migrate to higher-capacity DOCSIS 3.0 (and eventually DOCSIS 3.1) networks, they will need a way to eliminate OBI without compromising network performance. The ARRIS HPON solution powered by AgileMax meets this need by enabling DOCSIS 3.0 and DOCSIS 3.1 network capacity, allowing operators to reach the full potential 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.

AGILEMAX AM3200D SPECIFICATIONS (TYPICAL)

Characteristics	Specifications
Operating Wavelength	
Downstream	1551 nm ± 7.5 nm
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
Number of Subscriber Ports	32 (2 groups of 16)
Upstream Optical Input Level (Distribution Ports)	−10 to +3 dBm
Optical Test Point (Downstream)	−20 dB reference to each optical input
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 (note 1)
RF Test Point	22 dBmV (note 2)
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
Optical Connectors	SC/APC or LC/APC options
PON Wavelength Compatibility	Not Supported
Input Voltage Range, –48 VDC Units	–22 to –60 VDC
Input Voltage Range, +24 VDC/Mains Units	+22 to +29 VDC
Operating Temperature Range	–40°C to +60°C
Dimensions	1.72 in H x 16.73 in W x 11.25 in D (4.37 x 42.49 x 28.575 cm)
Weight	8.5 lbs (3.86 kg)

NOTES:
1. Via front panel switch
2. With 27 dBmV/ch input at an ARRIS ONU input. Adjustable from the front panel from 22dBmV to 7dBmV

ORDERING INFORMATION

1	2	3	4	5	6	7		9	10	11		13	14	15	16	17	18
A	M	3	2	0	0	D	—	A	2	N	—	N	1	Y	N	D	S

1 – 2	Module Type
	Rack Mount

3 – 4	Optical Split Ports
	32

5 – 6	EDFA Power (dBm)
	00 — no EDFA

7	Upstream Receiver Port
	D — 1370-1610 nm (excludes 1550 nm)

9	Return Laser Type
	A — 1611 nm B — 1471 nm C — 1491 nm D — 1591 nm E — 1571 nm F — 1551 nm G — 1531 nm H — 1511 nm

10	Additional Ports
	2 — 2x16 Forward Input

11	Local PON Injection Port
	N — None

13	Future
	N — None

14	Package
	1 — 1RU

15	Dedicated Upstream Port
	Y — Yes

16	Future 2
	N — None

17	Powering
	D — –48 VDC F — +24 VDC M — Mains (110/220 VAC)

18	Optical Connectors
	S — SC/APC L — LC/APC

RELATED PRODUCTS

CHP CORWave® 3 Transmitters	CP8xxxx RFoG ONUs
CHP EDFAs	HT3545
CH3000	FTTM2000 RFoG ONUs

Note: Specifications are subject to change without notice.

AgileMax AM3200D_DS_09NOV17 (rev 11-2017)

Customer Care

Contact Customer Care for product information and sales:

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