APEX1500

Narrowcast Edge QAM

PRODUCT OVERVIEW

The APEX1500, an ARRIS narrowcast edge QAM product, is optimized for narrowcast applications such as SDV and VOD. The APEX1500 provides flexibility, high QAM density, license-free VOD encryption, and low power in an extremely cost-effective two RU platform. The APEX1500 supports up to 96 total QAM channels across either 12 or 24 RF ports. The number of RF ports depends on the type of QAM modules that are installed in the chassis.

QAM Modules

The APEX1500 supports up to six hot-swappable QAM modules. There are multiple QAM module variations as shown in the table below. A QAM module soft upgrade is available to field-convert a 2x4 module to a 2x8 module.

QAM Module	RF Ports	QAM / RF
2X4	2	4 (frequency range 57 to 999 MHz)
2X8	2	8 (frequency range 57 to 999 MHz)
4X4	4	4 (frequency range 69 to 999 MHz)

Note: The QAM and power supply modules used in the APEX1500 are the same as those used in the APEX1000 product.

Physical Chassis

The APEX1500 is a two RU modular chassis that supports up to six QAM modules and up to two redundant power supply modules.

Power Supplies

Support for up to two hot-swappable redundant load-sharing power supplies. Operate with either one or two power supplies installed. AC and DC power supplies may be ordered optionally.

Note: If using DC power, the APEX1500 requires the use of power supply model number SFD550-S101G. The use of power supply model number SFD550-12BS154G is for exclusive use on the APEX1000.

GigE Interface

The APEX1500 receives all MPEG data via GigE. The chassis includes eight embedded 1000BaseT GigE ports as well as four SFP slots for insertion of either copper or optical SFPs. The GigE interfaces are all fully IGMPv3 compliant. GigE input redundancy is supported.

Applications

The APEX1500 is an all narrowcast platform with support for:

- Standards based SDV

- VOD (Common Tier Encryption)

GENERAL SPECIFICATIONS	
MODULAR CHASSIS	
Chassis Height	Two RU
Dimensions	3.5 in x 19.0 in x 25.5 in
Weight	34.5 lb (fully loaded)
QAM MODULES / RF OUTPUT	
QAM Modules	Up to six per chassis; purchase 2x4 or 2x8 or 4x4 modules; software upgrade 2x4 to 2x8
Hot-Swappable	Yes
RF Ports	2x4 / 2x8: 12 (6 modules) 4x4: 24 (6 modules)
QAM Channels per RF Port 2x4 / 4x4 Module 2x8 Module	Up to four Up to eight
Input Impedance	75 Ω
POWER	
Power Supplies	Two per chassis
Hot-Swappable	Yes
Load Sharing	Yes
AC Power Supply	100 to 240 VAC, 50/60 Hz
DC Power Supply SFD550-S101G	−40 to −60 VDC
Power Consumption	<3.5 W/QAM channel fully loaded (317 W typical)

ENVIRONMENTAL	
Operating Temperature	0° C to 40° C
Storage Temperature	−40° C to 70° C
Cooling	Eight fans, front-to-back airflow
Operating Altitude	−200 feet to 10,000 feet AMSL
Operating Humidity	5% to 95%
GIGABIT ETHERNET INPUT/OUTPUT	
GigE MPEG Data	Receive Only
GigE Physical Ports	Eight Copper GigE interfaces; Four SFP Slots
IGMPv3	Supported
Optical SFP Support	850, 1310, 15xx nm
Eectrical SFP Supportl	1000Base-T
OTHER PORTS	
Fast Ethernet	Two RJ-45 Ethernet
ASI Monitor	Single BNC
DTI	Two RJ-45
Serial Port	Single DB9

APEX1500 Individual Component Part Numbers

Component	Description	Part Number
APEX1500 Chassis	QAM Modules and power supply modules sold separately.	573209-005-00
QAM Module (2X4)	Two RF ports per module enable up to four QAMs per port.	540273-001-00
QAM Module (2X8)	Two RF ports per module enable up to eight QAMs per port	540273-002-00
QAM Module (4x4)	Four RF ports per module enable up to four QAMs per port	540273-005-00
Power Supply Module (AC)	AC Power Supply	540272-001-00
Power Supply Module (DC)	DC Power Supply	540272-002-00
APEX1500 Set Configuration Part Numbers		
APEX1500 V96 (2X8) AC	Includes one APEX chassis, one AC power supply module, six 2X8 QAM modules	573209-003-00
APEX1500 V96 (2X8) DC	Includes one APEX chassis, one DC power supply module, six 2X8 QAM modules	573209-004-00
APEX1500 V96 (4x4) AC	Includes one APEX chassis, one AC power supply module, six 4x4 QAM modules	573209-006-00
APEX1500 V96 (4x4) DC	Includes one APEX chassis, one DC power supply module, six 4x4 QAM modules	573209-007-00
QAM Module Upgrade		
QAM Module Upgrade	Field convert a 2X4 module to an 2X8 QAM module	540400-001-00

To order this service, contact your sales representative.

476666-086-00	APEX Configuration Service

CUSTOMER CARE

Contact Customer Care for product information and sales:

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

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