

ARRIS RX48

BSR 64000 DECOUPLED UPSTREAM MODULE

The TX48 upstream module for the I-CMTS platform BSR 64000 offers 48 upstream burst receivers across eight physical ports packed into a single energy efficient module. Each port may have up to 6 upstream RF receivers that can be easily enabled for increased, channel capacity. The RX48 incorporates next generation DOCSIS 3.0 Upstream MAC controllers, Upstream S-CDMA/A-TDMA Burst, Receivers, high-performance multicore processor and packet processing components to support the advanced DOCSIS 3.0 feature set, including Upstream Channel Bonding, enhanced security (AES, Security Provisioning), IPv6, Multicast, IPDR Extensions, and enhanced Upstream RF support.



- 48 burst return path receiver across 8 ports
- Advances spectrum management and ingress noise cancellation techniques for optimizing upstream capacity
- RF filtering and gain adjusting circuits to optimize Docsis 3.0, 2.0 and 1.x upstream RF signal linearity, MER and input RF signal level to the upstream RF burst receivers
- Integrated RF Switch design enables High-Availability Services with Hitless RS Redundancy (n:1)
- Increased Upstream Channel Density with a 60 % energy savings over prior generation RF modules
- Advanced S-CDMA design enables usage of low frequency Upstream Channels for greater upstream bandwidth
- Deployable in all BSR 64000 HD Chassis with existing 2.8, SRM, and Ether-Flex modules for maximum investment
- DOCSIS 3.0 Upstream Channel Bonding to support Ultra-Broadband services of 100 Mbps or more

SPECIFICATIONS

FLEXIBLE CONFIGURATIONS	
BSR 64000 I-CMTS Chassis Configuration with the TX32 and RX48 Decoupled DOCSIS 3.0 modules, SRM controller module, and Ether-Flex High-Speed Interface modules	
Deployable with 2:8 DOCSIS/EuroDOCSIS modules operating with unique MAC Domains	
FEATURES	
High-performance Dual-Core PPC Processor and Packet Processing Engines	
Advanced DOCSIS 3.0 Upstream MAC and Upstream Burst Receiver Chipset	
4 GB High-speed DDR2 Memory	
48 Upstream QAM receivers	
8 Upstream RF Ports	
Maximum of 6 upstream QAM receivers per RF port	
Field-Upgradable Firmware	
STANDARD-BASED	
Compliant with DOCSIS 3.0, 2.0, and 1.x	
Compatible with DOCSIS, J-DOCSIS, and EuroDOCSIS specifications	
RF	
Upstream RF frequency range	5 to 85 MHz
Upstream modulation	4 (QPSK), 8, 16, 32 and 64 QAM
RF Receive Input Level Range	-7 to +23 dBmV per DOCSIS 3.0 PHY Specification
Input load impedance	75 Ω
PHYSICAL	
Occupies a single slot in the BSR 64000 chassis	
Hot-swappable	
RF Interfaces	Eight 'F' type connectors on rear I/O module
Diagnostic Ports	DB-9 and RJ-45 (1000BASE-T Only)
Module LEDs	Fail, Status, and Alarm
Upstream Port LEDs	Link and Fault
Dimensions (H x W x D)	15.0 x 15.0 x 1.0 inches (38.1 x 38.1 x 2.54 cm)
Weight	4.1 lbs

MANAGEMENT	
Supports standards-based IP Detail Record/Streaming Protocol (IPDR/SP)	
Supports standards-based and Motorola Proprietary DOCSIS 1.x, 2.0, and 3.0 MIBs	
ENVIRONMENTAL	
Operating temperature	0° C (32° F) to +40° C (104° F)
Storage temperature	-20° C (-4° F) to +70° C (158° F)
Operating humidity	10%-95% non condensing
Non-Operating and Storage Humidity	5% - 95% non condensing
REGULATORY COMPLIANCE	
Safety UL60950-1:2003, 1st Ed; CSA C22.2 No. 60950-1-03, 1st Ed. IEC 60950-1:2001, 1st Ed.; EN 60950-1:2002, 1st Ed.; 2006/95/EC	
Electromagnetic Emissions EN 300386 V 1.4.1: 2008, Telecom Centers; 55022: 2006 +A1: 2007, Class A (specified by EN 300386); IEC CISPR 22: 2005 +A1: 2005, Class A; CFR 47 Part 15, Subpart B, Class A; VCCI V3: 2009, Class A; AS/ NZS CISPR 22: 2006, Class A 2004/108/EC	
Electromagnetic Immunity EN 300386 V 1.4.1: 2008, Telecom Centers; RRL Notice 2008-38	
Environmental RoHS, WEEE; 2005/95/ EC	
Physical Designed for NEBS GR-63-CORE Level 3 Requirements; ETS 300 019 Part 1-1 Class 1.1, Part 1-2 Class 2.2, Part 1-3 Class 3.1	
POWER	
Unit Power	150 W (typical)
SOFTWARE	
Minimum Software Revision	