



## C4<sup>®</sup> CMTS Release 8.1

### Specifications

#### Installation Environment

RF Interfaces	External F connector
Network-side Interfaces	10/100/1000 BaseT Ethernet and Gigabit Ethernet over fiber (SFP); 10 Gig Ethernet (XFP)
Power	Dual DC voltage mains: -48 Vdc (-44 to -72 Vdc); Optional AC power configuration
Power Consumption (note 1)	Nominal – 2500 W      Maximum – 2800 W at -48 Vdc Note 1 – Nominal power consumption for DOCSIS 3.0 Duplex full-fill chassis with 1:1 active U:D ratio.

#### RF Downstream

Frequency Range (MHz)	91 to 999 (DOCSIS <sup>®</sup> 3.0); 112 to 999 (EuroDOCSIS <sup>™</sup> 3.0)
Modulation Schemes	64 QAM, 256 QAM
Data Rate (Mbps) (Max.)	Up to 55.62 per channel
RF Output Level (dBmV)	41 to 60

#### RF Upstream

Frequency Range (MHz)	5 to 65 (DOCSIS 3.0). 24U CAM hardware: 5 to 85 MHz (not currently supported in software)
Modulation Schemes	QPSK, 16 QAM, 32 QAM, 64 QAM
Data Rate (Mbps) (Max.)	Up to 30.72
Receive Input Level (dBmV)	-16 to 29

#### Physical

Operating Temperature:	
Short Term °F (°C)	+23 to +131 (-5 to +55)
Long Term °F (°C)	+41 to +104 (+5 to +40)
Storage Temperature °F (°C)	-40 to +158 (-40 to +70)
Operating Humidity (Min.-Max.)	5 to 85% (Non condensing)
Dimensions (H x W x D) in. (cm)	24.5 x 17.4 x 20.0 (62.2 x 44.2 x 50.8)
Weight lbs. (kg)	178 (80.9)

#### Software Release 8.1 Features (Partial List)

System Control Module 3 (SCM 3)	DOCSIS 3.0 Multicast IP Video Support (via IGMPv3)
PacketCable 2.0 LAES	Multicast CAC for IP Video (Phase 1)
IPv6 Support for PCMM	Policy-Based Routing
Load Balancing of D3.0 Voice Flows (DS and US)	Dynamic CM Load Balancing, including Cross-MAC Domain
DSG 3.0	DOCSIS 3.0 Eight Channel Bonding (Downstream)
Broadcast ARP and NS Request Reduction	DOCSIS 3.0 Four Channel Bonding (Upstream)
16D CAM, XD CAM (32D Annex B, 24D Annex A)	BSoD L2 VPN
12U CAM, 24U CAM	BPI+ Enforce
IPv6 Support, Including:	TFTP Enforce and Dynamic Shared Secret
IS-IS Multi-Topology Support	Integrated Upstream Agility
OSPFv3	PIM-SSM, IGMPv2, and static multicast
DHCPv6 Prefix Delegation with Route Injection	RIPv2 (RFC 1723), OSPFv2 (RFC 2328), IS-IS, BGPv4
Cable Source Verify with DHCP Lease Query	SII Lawful Intercept (RFC 3924)
TFTP Enforce & Dynamic Shared Secret for IPv6 CMs	802.1Q VLAN tagging

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# ARRIS C4 CMTS Release 8.1 Technical Specification

## Specifications Continued

### Regulatory

Designed to NEBS Level 3 Requirements  
Safety: UL® 60950, CSA C22.2 No. 950, IEC60950  
EMC: GR-1089-CORE (ESD, Grounding Electrical Safety)  
FCC Part 15 Class A, EN300 386-2 (CISPR 22, Class A)  
Environmental: GR-63-CORE, ETS 300 019

### Ordering Information

#### Hardware and Software

801092	C4 CMTS Rel. 8.1 Upstream License for 12U CAM or 24U CAM
801093	C4 CMTS Rel. 8.1 Downstream License for XD CAM or 16D CAM
801094	C4 CMTS Rel. 8.1 Software on CD-ROM
713877	ARRIS C4 Chassis, 21 Slot Chassis Assembly 14RU Chassis, 3 High Speed Fans
708369	Physical Interface Card (PIC) for Slot 19 for Use with SCM with Fan Controller
708963	Physical Interface Card (PIC) for Slot 20 for Use with SCM without Fan Controller
799087	System Control Module 3 (SCM 3) (requires Rel. 8.1 or later software)
793931	System Control Module II Enhanced Memory (Updated) (SCM II EM(U))
722013	Router Control Module (RCM)
722891	Router Control Module Crossover Connector
794040	Optimized 16D Cable Access Module (CAM) Kit (Active) Licensed for 16 Downstreams, DOCSIS/EuroDOCSIS 3.0
794043	Optimized 16D Cable Access Module (CAM) Kit (Spare) Licensed for 16 Downstreams, DOCSIS/EuroDOCSIS 3.0
794041	Optimized 24D Cable Access Module (CAM) Kit (Active) Licensed for 24 Downstreams, EuroDOCSIS 3.0
794044	Optimized 24D Cable Access Module (CAM) Kit (Spare) Licensed for 24 Downstreams, EuroDOCSIS 3.0
794042	Optimized 32D Cable Access Module (CAM) Kit (Active) Licensed for 32 Downstreams, DOCSIS 3.0
794045	Optimized 32D Cable Access Module (CAM) Kit (Spare) Licensed for 32 Downstreams, DOCSIS 3.0
790562	24U Cable Access Module (CAM) Kit (Even) Licensed for 24 Upstreams, DOCSIS/EuroDOCSIS 3.0
790563	24U Cable Access Module (CAM) Kit (Odd) Licensed for 24 Upstreams, DOCSIS/EuroDOCSIS 3.0
790564	24U Cable Access Module (CAM) Kit (Spare) Licensed for 24 Upstreams, DOCSIS/EuroDOCSIS 3.0

#### XD CAM Field Software Upgrade

793929	16D to 24D Cable Access Module (CAM) Field Software Upgrade, EuroDOCSIS 3.0
793930	16D to 32D Cable Access Module (CAM) Field Software Upgrade, DOCSIS 3.0

#### Ethernet Network Interface Options

722872	C4 CMTS SFP Electrical Interface, 1000Base-TX
722093	C4 CMTS SFP Optical Interface, 1000Base-SX
780180	C4 CMTS SFP Optical Interface, 1000Base-ZX
728965	C4 CMTS SFP Optical Interface, 1000Base-LX10
722873	C4 CMTS XFP Optical Interface, 10GBase-SR
780243	C4 CMTS XFP Optical Interface, 10GBase-ER
728887	C4 CMTS XFP Optical Interface, 10GBase-LR/LW
780244	C4 CMTS XFP Optical Interface, 10GBase-ZR

#### Maintenance Plan (required)

708387	Software Maintenance - Phone Plus Gold
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Specifications are subject to change without notice.

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