



## C4<sup>®</sup> CMTS Release 8.1.5

### 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 8.1.5 Features (Partial List)

32D CAM Support for Annex A	DOCSIS 3.0 16 Channel Bonding (Downstream)
IS-IS Point-to-Point Adjacencies	DOCSIS 3.0 Four Channel Bonding (Upstream)
DCC Command for Nx1 Bonded Cable Modems	DSG 3.0
CM-STATUS Sequence Out of Range Handling	IPv6 Support, Including:
Show Tech Support Brief	IS-IS Multi-Topology Support
Store Only Valid BPI Certificates	OSPFv3
CAM Downstream Power Monitoring	DHCPv6 Prefix Delegation with Route Injection
24 Downstream Channel Bonding – Trial Only	Cable Source Verify with DHCP Lease Query
Piggyback Support for rtPS Flows	TFTP Enforce & Dynamic Shared Secret for IPv6 CMs
Provisionable Upstream Equalizer Taps	IPv6 Support for PCMM
5 – 85 MHz Upstream Support (24U CAM – Lab Only)	DOCSIS 3.0 Multicast IP Video Support (via IGMPv3)
System Control Module 3 (SCM 3)	Dynamic CM Load Balancing, including Cross-MAC Domain
16D CAM, XD CAM (32D Annex A or B)	RIPv2 (RFC 1723), OSPFv2 (RFC 2328), IS-IS, BGPv4
12U CAM, 24U CAM	BSoD L2 VPN

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# ARRIS C4 CMTS Release 8.1.5 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

796880	C4; I-CMTS Simplex New Chassis Kit with SCM II EM(U) - Simplex Control Complex, includes 1 RCM & SCM and associated PIC
789561	C4; I-CMTS Duplex New Chassis Kit with SCM II EM(U) - Duplex Control Complex, includes 2 RCMs & 2 SCMs and associated PICs, 1 RCM Crossover Connector
781210	C4; I-CMTS Simplex New Chassis Kit with SCM 3 - Simplex Control Complex, includes 1 RCM & SCM and associated PIC
802264	C4; I-CMTS Duplex New Chassis Kit with SCM 3 - Duplex Control Complex, includes 2 RCMs & 2 SCMs and associated PICs, 1 RCM Crossover Connector
798990	C4 CMTS System Control Module II Enhanced Memory (U) (SCM II EM(U)) with Rel. 8.x
799087	System Control Module 3 (SCM 3) with Rel. 8.1
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
722013	C4 CMTS Router Control Module (RCM)
722891	C4 CMTS Router Control Module - Crossover Connector. One required for each Duplex RCM
794040	C4; Optimized 16D CAM Kit (Active): 1 16D CAM, PIC, and SW, DOCSIS/EuroDOCSIS 3.0
794043	C4; Optimized 16D CAM Kit (Spare): 1 16D CAM, CAM PIC, and SW, DOCSIS/EuroDOCSIS 3.0
794041	C4; Optimized EuroDOCSIS 24D CAM Kit (Active): 1 24D CAM, PIC, and SW, EuroDOCSIS 3.0
794044	C4; Optimized EuroDOCSIS 24D CAM Kit (Spare): 1 24D CAM, CAM PIC, and SW, EuroDOCSIS 3.0
794042	C4; Optimized 32D CAM Kit (Active): 1 32D CAM, PIC, and SW, DOCSIS 3.0
794045	C4; Optimized 32D CAM Kit (Spare): 1 32D CAM, CAM PIC, and SW, DOCSIS 3.0
801153	C4; Optimized EuroDOCSIS 32D CAM Kit (Active): 1 32D CAM, PIC, and SW, EuroDOCSIS 3.0
801154	C4; Optimized EuroDOCSIS 32D CAM Kit (Spare): 1 32D CAM, PIC, and SW, EuroDOCSIS 3.0
790562	C4; 24U CAM Kit (Even) - 1 24U CAM, Even CAM PIC, and 24 Upstream Licenses
790563	C4; 24U CAM Kit (Odd) - 1 24U CAM, Odd CAM PIC, and 24 Upstream Licenses,
790564	C4; 24U CAM Kit (Spare) - 1 24U CAM, Spare CAM PIC, and 24 Upstream Licenses,
799079	C4; 24U CAM Kit (Even) Licensed for 16 upstream - 1 24U CAM, Even CAM PIC, and 16 Upstream
799080	C4; 24U CAM Kit (Odd) Licensed for 16 upstream - 1 24U CAM, Odd CAM PIC, and 16 Upstream
799081	C4; 24U CAM Kit (Spare) Licensed for 16 upstream - 1 24U CAM, Spare CAM PIC, and 16 Upstream
799149	C4; License Upgrades: 8 US Taking 24U CAMs Licenses with 16 Upstreams to 24

#### XD CAM Field Software Upgrade

793929	C4; UPGRADE 16D to 24D EuroDOCSIS CAM - License Key for Field Upgrade
793930	C4; UPGRADE 16D to 32D DOCSIS CAM - License Key for Field Upgrade
802249	C4; UPGRADE 16D to 32D EuroDOCSIS CAM - License Key for Field Upgrade
801106	C4; UPGRADE 24D to 32D EuroDOCSIS CAM

#### Ethernet Network Interface Options

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

#### Maintenance Plan (Required)

708387	Software Maintenance - Phone Plus Gold - SVC CTRCT; Gold C4 CMTS, C4c I-CMTS
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