



C4® CMTS

12U Cable Access Module

Features

- High density
- Independent upstream channel deployments
- Legendary C4 CMTS hot swappable "hitless" redundancy
- Flexible upstream mapping
- Advanced services and improved upstream bandwidth performance using DOCSIS 3.0 capabilities



The ARRIS C4 CMTS 12U Cable Access Module (CAM) provides twelve physical upstream RF receivers for the ARRIS C4 Cable Modem Termination System (CMTS). The C4 CMTS is a high-performance, next-generation carrier-class CMTS for advanced IP services. The C4 CMTS supports up to sixteen CAMs in the 21 slot system chassis. The C4 CMTS with the 12U CAM is DOCSIS® 3.0 qualified.

ARRIS FlexCAM Technology

The C4 CMTS contains patented FlexCAM hitless RF sparing technology that provides superior reliability and flexibility. This integrated RF sparing includes support for multiple flexible RF sparing groups. With "hitless" RF sparing, if a failure occurs on a DOCSIS CAM, all of the cable modems connected to the failed CAM are immediately switched to the spare CAM in the sparing group. For "hitless" RF sparing, up to eleven active upstream modules are supported in a CAM Sparing Group. The C4 CMTS continues to lead the industry now with independent downstream and upstream modules and sparing groups that allow an operator to "tailor" available service bandwidth in both the upstream and downstream directions within the same C4 CMTS chassis. In this way, operators can engineer particular nodes for bandwidth and system availability based on the traffic of planned services. For example, an operator may choose to deploy a single upstream for voice services, while providing channel bonding for residential and commercial data services.

Flexible Mapping

With the 12U CAM, an MSO can map any of the twelve physical upstream receivers to any of the eight physical F-connectors. Also, multiple upstream receivers can be assigned to the same F-connector with up to 12 upstream receivers mapped to the same physical F-connector. With flexible upstream mapping, the C4 CMTS enables virtual node splits that can help to reduce or even eliminate physical wiring changes normally associated with node splits. This advanced capability provides the flexibility to meet different Downstream-to-Upstream ratios that many advanced services require, such as telephony, peer-to-peer, gaming, and very high speed commercial and residential services.

Ingress Cancellation

Ingress noise cancellation provides critical performance improvements by increasing the immunity of the upstream carriers to ingress noise. The 12U CAM has demonstrated that it is capable of handling noise sources above 0 dBc in power. Additionally, cancellation of as many as 16 different ingress sources has been successfully demonstrated.

Spectral Monitoring

The 12U CAM design incorporates an all-digital RF front end. The entire available spectrum (5-65 MHz) is digitized on each of the CAM's eight upstream physical ports. By using digital signal processing techniques, the C4 CMTS can report upstream signal-to-noise ratio (SNR) with increased accuracy and on a per-cable modem basis.

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Specifications

Installation Environment:	Frequency Range (MHz)	5-65 (DOCSIS 3.0)
	Modulation	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.)	5-85% (Non condensing)
	Dimensions (HxWxD) in. (cm)	24.5 x 17.4 x 20.0 (64.6 x 44.2 x 50.8)
Weight lbs (kg)	approx 4 (1.8)	

Ordering Information

Part #	Description
710424	12U CAM Physical Interface Card (PIC) – Even Slot position
710425	12U CAM Physical Interface Card (PIC) – Odd Slot position
710426	12U CAM Physical Interface Card (PIC) – Spare Slot position
722015	12U Cable Access Module (CAM) DOCSIS 3.0

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