



C4® and C4c™ CMTS

24U Cable Access Module



Features

- Double-density upstream RF module
- DOCSIS® 3.0 upstream channel bonding
- Independent upstream channel module, separate from downstream module
- Legendary fully-integrated C4 CMTS “hitless” RF sparing
- Hot swappable
- Flexible mapping of upstream channels to downstream channels
- Supported in all C4 and C4c CMTS chassis

Application

The 24U Cable Access Module (CAM) provides twenty-four physical upstream RF receivers on a single blade for the ARRIS C4 Cable Modem Termination System (CMTS). The 24U CAM uses the same Physical Interface Card (PIC) as the current 12U CAM with eight F connectors. In addition, these upstream channels can be positioned anywhere in the upstream spectrum of 5 MHz to 85 MHz (5 to 65 MHz with Release 8.0).

DOCSIS 3.0 Upstream Channel Bonding

The 24U CAM supports DOCSIS 3.0 upstream channel bonding with variable size bonding groups and flexible channel configurations. This allows for the aggregation of two or more DOCSIS upstream channels to support high upstream bandwidths. The flexible channel configurations allows operators to bond across channels that use different modulations and channel widths, providing the flexibility an operator needs to accommodate non-DOCSIS 3.0 and DOCSIS 3.0 modems on the same upstream module. The C4 CMTS software allows up to four upstream channels to be bonded, and all 24 channels of the 24U CAM support bonding (in groups of four channels each).

ARRIS FlexCAM™ RF Sparing Technology

The C4 CMTS contains patented FlexCAM technology that provides fully integrated “hitless” RF sparing. This sparing includes support for multiple 24U CAM RF sparing groups, the size of which can vary from one to nine active 24U CAMs. If a failure occurs on a 24U CAM with “hitless” RF sparing, the spare 24U CAM automatically replaces the failed module so that cable modems remain in service with minimal packet loss.

Flexible Mapping of Upstreams to F connectors

With the 24U CAM, an MSO can map the twenty-four physical upstream receivers to the eight physical F connectors with a maximum of 12 upstreams on a single F connector.

C4® and C4c™ CMTS 24U Cable Access Module

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.

Flexible Upstream-to-Downstream Channel Mapping

Each upstream channel on the 24U CAM can be associated with any downstream channel on a D CAM in the chassis as long as the upstreams for a MAC domain remain on a single module. This allows the operator to “right size” the upstream-to-downstream ratio for each service group. This flexibility reduces capital costs as less channels will sit idle compared to a system with a fixed upstream-to-downstream ratio.

Ingress Cancellation

Ingress noise cancellation provides critical performance improvements by increasing the immunity of the upstream carriers to ingress noise.

Spectral Monitoring

The 24U CAM design incorporates an all-digital RF front end. The entire upstream spectrum 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 and per-channel basis.

Legacy DOCSIS 2.0, 1.1, and 1.0 Cable Modem Support

All channels on the 24U CAM can support DOCSIS 3.0, including channel bonding, as well as DOCSIS 2.0 and 1.x modems at the same time.

Supported in Existing C4 and C4c CMTS Chassis

The 24U CAM protects the operator’s investment as it is supported in all previously deployed C4 and C4c CMTS chassis when paired with the Router Control Module (RCM) and either a 16D CAM or an XD CAM.

www.arrisi.com

Find more information about the 24U Cable Access Module and other C4® and C4c™ products.

- Product Specifications — 24U Cable Access Module Technical Specifications

Customer Care

Contact Customer Care for product information and sales

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

Preliminary, subject to change without notice.

The capabilities, system requirements and/or compatibility with third-party products described herein are subject to change without notice. ARRIS, the ARRIS logo, Auspice®, C3™, C4®, C4c™, Cadant®, C-COR®, CHP Max®, ConvergeMedia™, Cornerstone®, CXM™, D5™, Digicon®, Flex Max®, Keystone™, MONARCH®, n5™, nABLE™, nVision®, OpsLogic®, OpsLogic® Service Visibility Portal™, PLEXIS®, PowerSense™, Regal®, ServAssure™, Service Visibility Portal™, TeleWire Supply®, TLX®, Touchstone®, VoiceAssure™, VSM™, and WorkAssure™ are all trademarks of ARRIS Group, Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and the names of their products. ARRIS disclaims proprietary interest in the marks and names of others. © Copyright 2012 ARRIS Group, Inc. All rights reserved. Reproduction in any manner whatsoever without the express written permission of ARRIS Group, Inc. is strictly forbidden. For more information, contact ARRIS.



www.arrisi.com