## C4® and C4c™ CMTS
eXtended Downstream Cable Access Module (XD CAM) Technical Specifications

### Specifications

#### RF Downstream
- **Frequency Range (MHz)**: 91 to 999 (DOCSIS® 3.0); 112 to 999 (EuroDOCSIS™ 3.0)
- **Modulation (QAM)**: 64, 256
- **Data Rate (Mbps) (Max.)**: 30.34 to 55.62 per channel
- **RF Output Level (dBmV)**: 41 to 60
- **Typical Modulation Error Ratio (MER) (dB)**: 47
- **Symbol Rate (Msym/sec)**: 5.361 (DOCSIS); 6.952 (EuroDOCSIS)
- **Bandwidth (MHz)**: 6 (DOCSIS), 8 (EuroDOCSIS)
- **Output (load) impedance (ohms)**: 75

#### Physical
- **Power**: -48 VDC (-44 to -72 VDC)
- **Power Consumption**:
  - Classic Rev G: 140 W max at -48 VDC, 77°F (25°C)
  - Optimized: 137 W max at -48 VDC, 77°F (25°C)
- **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)**: 15.8 x 0.8 x 15.0 (40.0 x 1.9 x 38.1)
- **Weight lbs. (kg)**: approx 4 (1.8)

#### Support with Software Release 7.4
- XD CAM (32D Annex B, 24D Annex A)
- 8-8-8-8 Channels per F Connector (Annex B)
- 8-4-8-4 Channels per F Connector (Annex A)
- IPv6 Phase 3
- Cable Source Verify with DHCP Lease Query
- Route Injection (RI) for DHCPv6 Prefix Delegation
- OSPFv3
- DOCSIS 3.0 Multicast IP Video Support (via IGMPv3 Control)
- Policy-Based Routing
- Cross-MAC Domain Dynamic Load Balancing
- Additional Classifier Support (for MGPI applications)
- DOCSIS 3.0 Eight Channel Bonding (Downstream)
- DOCSIS 3.0 Four Channel Bonding (Upstream)
- BSoD L2 VPN
- BPI+ Enforce
- IPDR/SP

Integrated Upstream Agility
PIM-SSM, IGMPv2, and static multicast
RIPv2 (RFC 1723), OSPFv2 (RFC 2328)
IS-IS, BGPv4
PacketCable™ Multimedia Support
Dynamic Cable Modem Load Balancing
SII Lawful Intercept (RFC 3924)
In-chassis Mixed Annex A & Annex B support
802.1Q VLAN tagging
Extended ACLs & Named ACLs
Secure Shell v2 (SSHv2)
DOCSIS Ping
ARP Abuse Counts
DHCP Relay Agent (Option 82)
DNS Client
TFTP Enforce and Dynamic MIC

Continued on the next page…
<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XD CAM Kits</td>
<td></td>
</tr>
<tr>
<td>790565</td>
<td>Classic 24D EuroDOCSIS CAM Kit (Active): 1 x 24D CAM, PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>790566</td>
<td>Classic 24D EuroDOCSIS CAM Kit (Spare): 1 x 24D CAM, CAM PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>790567</td>
<td>Classic 32D DOCSIS CAM Kit (Active): 1 x 32D CAM, PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>790568</td>
<td>Classic 32D DOCSIS CAM Kit (Spare): 1 x 32D CAM, PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>793977</td>
<td>Classic 24D EuroDOCSIS CAM Kit (Active): 1 x 24D CAM, PIC, and SW for C4c CMTS</td>
</tr>
<tr>
<td>793978</td>
<td>Classic 32D DOCSIS CAM Kit (Active): 1 x 32D CAM, PIC, and SW for C4c CMTS</td>
</tr>
<tr>
<td>794041</td>
<td>Optimized 24D EuroDOCSIS CAM Kit (Active): 1 x 24D CAM, PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>794044</td>
<td>Optimized 24D EuroDOCSIS CAM Kit (Spare): 1 x 24D CAM, CAM PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>794042</td>
<td>Optimized 32D DOCSIS CAM Kit (Active): 1 x 32D CAM, PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>794045</td>
<td>Optimized 32D DOCSIS CAM Kit (Spare): 1 x 32D CAM, PIC, and SW for C4 CMTS</td>
</tr>
<tr>
<td>794048</td>
<td>Optimized 24D EuroDOCSIS CAM Kit (Active): 1 x 24D CAM, PIC, and SW for C4c CMTS</td>
</tr>
<tr>
<td>794047</td>
<td>Optimized 32D DOCSIS CAM Kit (Active): 1 x 32D CAM, PIC, and SW for C4c CMTS</td>
</tr>
<tr>
<td>XD Field Software Upgrade</td>
<td></td>
</tr>
<tr>
<td>793929</td>
<td>Upgrade 16D to 24D EuroDOCSIS CAM – License Key for C4 CMTS Field Upgrade</td>
</tr>
<tr>
<td>793930</td>
<td>Upgrade 16D to 32D DOCSIS CAM – License Key for C4 CMTS Field Upgrade</td>
</tr>
<tr>
<td>793979</td>
<td>Upgrade 16D to 24D EuroDOCSIS CAM – License Key for C4c CMTS Field Upgrade</td>
</tr>
<tr>
<td>793980</td>
<td>Upgrade 16D to 32D DOCSIS CAM – License Key for C4c CMTS Field Upgrade</td>
</tr>
<tr>
<td>Maintenance Plan (required)</td>
<td></td>
</tr>
<tr>
<td>708387</td>
<td>Software Maintenance – Phone Plus Gold</td>
</tr>
</tbody>
</table>

Specifications are 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, Arris®, BreezeWave®, C2™, C3®, C4®, Cadant®, C-COR®, CIP Max™, CIP Max1000™, ConvergeMedia®, Conversetone®, CORWave®, CSM®, DTV®, Digicom®, ENCORE®, Flex Max®, HEIN®, Keystone™, KEVO™, MAXI®, Maxi®, n3®, nABLE®, nVision®, OpsLogic®, OpsLogic® Service Visibility Portal™, PLEIG®, PowerSense™, QUARTET®, Regal™, ServAssure™, Service Visibility Portal™, TeleFire Supply®, TLP®, Touchstone®, E21® VPN, VoiceAssure™, VISI™, 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 2011 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.