

### ***C1000/C1500/2000 Series – DOCSIS 1.0 CMTS (upgradeable to 1.1)***

C9 Networks provides a highly integrated, low maintenance, & high performance Cable Modem Termination System (CMTS). This product is price-performance optimized for small/medium MSO's and the MTU/MDU market and is available as a 1U pizza box providing:

1. CMTS with 1 Down Stream & up to 4 Up Stream channels
2. Integrated up-converter
3. CMTS servers like DHCP, TFTP & ToD.
4. Web server for local & remote Configuration and Management
5. Subscriber Service provisioning.

All the components required for providing data on cable are integrated into one single 1U box providing the “Headend in a Box”. This system with the highest performance for the lowest cost is an ideal solution for small/medium MSO's, Fiber node-applications and in MTU/MDU applications. This system is software upgradeable to DOCSIS 1.1.

#### **Components of the C1000/C2000:**

The core components of the C1000 & C2000 system are:

1. DOCSIS CMTS: This supports one 1DS and an option of either 1 US channel (C1000) or 4 US channels (C2000).
2. Integrated up-converter: The integrated upconverter reduces the cost of the total system.
3. CMTS Servers: All the servers specified in the DOCSIS standard for CMTS operation are

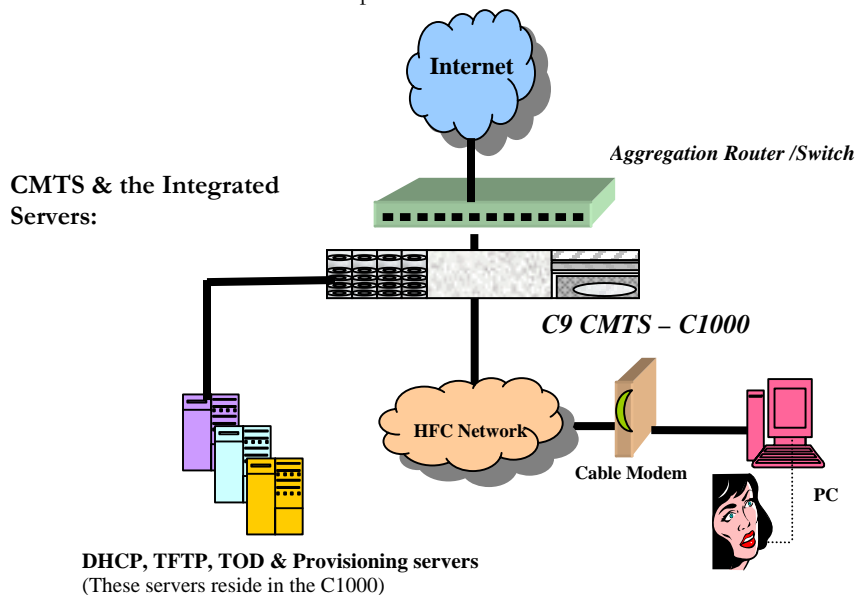
integrated into the CMTS. Typically our competition ships this function as a separate box for an additional cost.

4. Subscriber Service Provisioning: Subscriber service activation and deactivation enables operator to choose the users/modems that can obtain data service in the network. (Optional feature)

#### **Applications of the C1000/C2000 CMTS**

The C1000/C2000 CMTS is a compact solution for smaller distribution hub, Multi-Tenant Units (MTU/MDU) and hospitality business. This solution enables the operator to provide Cable TV and data on the existing cable infrastructure. In the case of an MTU this eliminates the need to rewire the building with Cat5 for data service. This also enables IP multicast video on cable network.

This purpose-built CMTS is price-performance optimized for small/medium MSOs and MTU/MDUs. This solution enables an operator to cost effectively roll out a complete solution at the flip of a switch. All the components required for the operation are integrated into the 1U pizza box solution providing reduced cost of acquiring the technology, low cost of deployment, almost no integration cost and quick generation of revenues. C1000 is the most compact and cost effective solution in the market. This is the only product that can claim to a “Headend-in-a-box” for data services.



## C1000 /C1500/ C2000 Specifications:

	Description
Physical	Form Factor            1U Pizza box Height                    1.75 in / 4.45 cm Width                     19 in / 48.3 cm Depth                    22 in (approx) Weight                    - Rack Mounting         Yes
Network & Interfaces	<ul style="list-style-type: none"> <li>• Layer2 Bridge</li> <li>• 2 Fast Ethernet Ports</li> </ul>
RF Spectrum Support	<u>Downstream Parameters</u> <ul style="list-style-type: none"> <li>• 1 Downstream Port</li> <li>• Downstream modulation 256QAM and 64QAM</li> <li>• Downstream per channel bit rate 38 Mbps and 27 Mbps</li> <li>• Downstream IF signal: 44MHz at 32.5dbmV (+/- 2dbmV)</li> </ul> <u>Upstream Parameters</u> <ul style="list-style-type: none"> <li>• C1000/C1500/C2000 = 1/2/4 Upstream ports respectively</li> <li>• Upstream Modulation 16QAM and QPSK (various symbol rates supported)</li> <li>• Upstream per channel bit rate 10 Mbps</li> <li>• Upstream signal level: -11dbmV</li> </ul>
UpConverter	<ul style="list-style-type: none"> <li>• Internal Up-converter</li> <li>• Programmable 88 to 860MHz</li> <li>• Power 40 to 63dbmV</li> </ul>
DOCSIS Support	<ul style="list-style-type: none"> <li>• DOCSIS 1.0</li> <li>• DOCSIS 1.1 software upgradeable</li> <li>• Euro-DOCSIS support (to be added soon).</li> <li>• Inter-operates with all DOCSIS modems</li> </ul>
User interface	<ul style="list-style-type: none"> <li>• Web interface, CLI and SNMP</li> <li>• Remote monitoring and configuration</li> </ul>
Network Management & Provisioning	<ul style="list-style-type: none"> <li>• SNMPv1 and v3</li> <li>• IETF MIBS</li> <li>• DOCSIS 1.0 MIBs</li> <li>• Tools to monitor RF levels of CM and CMTS</li> <li>• Tools to display the MAC and IP address of CM and CPE's.</li> </ul>
CMTS Servers	<ul style="list-style-type: none"> <li>• Servers: DHCP, TOD, TFTP, FTP, Telnet and Web Server</li> <li>• Integrated with the CMTS in the same 1U box.</li> </ul>
Network features & tools	<ul style="list-style-type: none"> <li>• Support for Non-routable IP addresses for Cable Modems.</li> <li>• Routable IP addresses for CPE's.</li> <li>• DHCP relay and tagging</li> </ul>
Subscriber Provisioning (Optional)	<ul style="list-style-type: none"> <li>• Subscriber Provisioning Manager: Service activation/de-activation and IP address assignment/management.</li> <li>• Optional feature</li> </ul>

**Note: C1000, C1500 & C2000 differences on next page.**

For more information please contact us at:  
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Visit our web site at: [www.C9Networks.com](http://www.C9Networks.com)

## **C1000, C1500 and C2000 Specifications:**

### **Upstream channels:**

- C2000 has 4 Upstream channels
- C1500 has 2 Upstream channels
- C1000 has 1 Upstream channels
- Independently programmable to any of the standard DOCSIS modulation schemes

### **Cable Modem capacity:**

- Total cable Modems supported by C1000: 200 to 250
- Total cable Modems supported by C1500: 400 to 500
- Total cable modems supported by C2000: 650 to 800

**For more information please contact us at:**

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**Visit our web site at: [www.C9Networks.com](http://www.C9Networks.com)**

### **C9 NETWORKS**

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