

## 1RU Compact DOCSIS 3.0 CMTS Platform

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### C3000 Series



- **DOCSIS3.0/Euro-DOCSIS3.0 Compliant**
- **32 Downstream Channels**
- **8 Upstream Channels**
- **1000 CMs simultaneous online**
- **Support layer 3 routing, static route, policy route, VLAN, L2VPN, ACL etc**
- **Supports IPv6, multicast, remote-query, Flap (DOCSIS signal quality jitters diagnosis)**
- **Security: Support BPI+, CM authentication, anti-DoS attack, user isolation, IP source address check , and more**

The C3000 DOCSIS 3.0 1RU CMTS is an indoor 1U chassis device in the D3 series CMTS. It is specially designed for applications deployed in the front-end equipment room and has high coverage efficiency. It provides high bandwidth internet access with high QoS control capability. It is designed to provide video services that require low latency and high throughput, such as IPTV and VOD, under heavy internet access requirements.

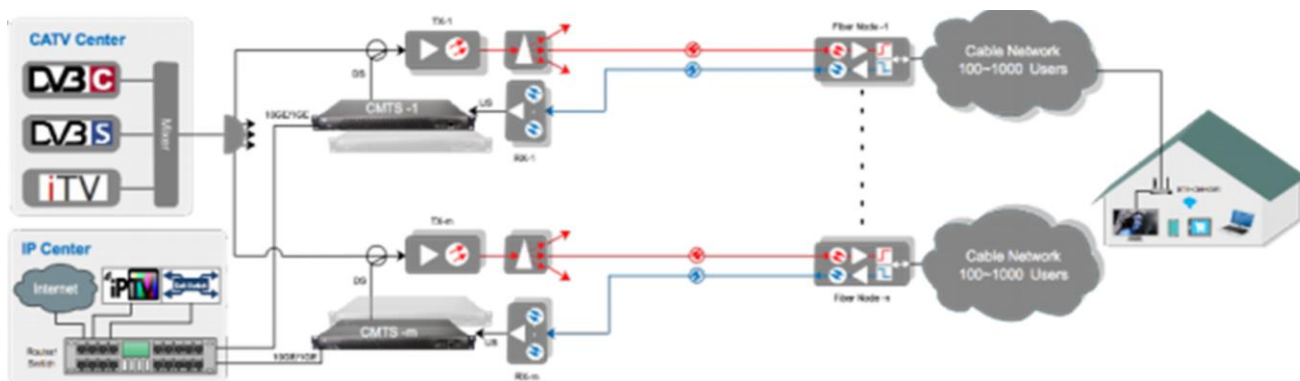
The C3000 DOCSIS 3.0 1RU CMTS has 1GE/10GE SFP/SFP+ optical ports and RJ45 electrical port. It has a built-in DHCP/TFTP/TOD server, no additional accessory equipment, easy installation, simple configuration, and high cost performance.

The C3000 series has various product forms build for indoor, outdoor (D-node), mini front-end and modular type to meet various deployment scenarios. Bundled with 32 QAM channels for downstream (sharing one RF port), the data rate can reach up to 2Gbps. The downstream can be easily configured as data channels or IPQAM channels. It also supports multicast capabilities. Bundled with 8 QPSK/QAM channels for upstream (sharing one RF port), the data rate can reach up to 320Mbps. It also provides the upstream spectrum analysis function. It can run in L3 or L2 mode and can be adapted to varieties of operation environment for different requirements.

## Key Features

- Compliant with DOCSIS3.0/Euro-DOCSIS3.0/C- DOCSIS standards
- DS ×32, it can be easily configured to 64/256/1024QAM modulation mode with a maximum data rate of 2Gbps@1024QAM
- US ×8, it can be easily configured to QPSK/3~8 order QAM modulation mode, with the maximum data rate of 320Mbps@256QAM
- The number of channel bundles can be easily changed to facilitate the operator's planning and utilization of frequency resources
- Maximum 1000 CMs simultaneous online
- Supports layer 3 routing, static route, policy route, VLAN, L2VPN, ACL etc
- Built-in DHCP/TFTP/ToD server, supports for DHCP relay, and multiple subnet subnets under CPE. Option 82/60 is supported
- Both US and DS channels can achieve load balancing based on CM quantity (static) or traffic (dynamic) to ensure effective utilization of bandwidth resources
- Supports IPv6, multicast, remote-query, Flap (DOCSIS signal quality jitters diagnosis), etc
- The US/DS service classifiers are used to implement the service flow-based QoS mechanism to ensure the bandwidth and delay requirements of various services
- Security: Support BPI+, CM authentication, anti-DoS attack, user isolation, IP source address check, and more

## Application Diagram



## 1RU Compact CMTS Specifications

				Down Stream		Up Stream			
				Euro-DOCSIS3.0	DOCSIS3.0				
Modulation Mode				64QAM/256QAM/1024QAM		256QAM/128QAM//64QAM/32QAM/16QAM/8QAM/ QPSK			
Frequency Range (MHz)				108~1002/1218		5~85/65			
Single Channel BW (MHz)				8	6	Single Channel BW (MHz)	6.4	3.2	1.6
Bounding Channels				32		8			
Maxim Total Data Rate (Mbps)				2000		1600		320	
Single Channel Data Rate (Mbps)	64QAM	41	27	Single Channel Data Rate (Mbps)	256QAM*	40.96	20.48	10.24	
					128QAM*	35.84	17.92	8.96	
	256QAM	55	38		64QAM	30.72	15.36	7.68	
					32QAM	25.60	12.80	6.40	
	1024QAM*	69	53		16QAM	20.48	10.24	5.12	
					8QAM	15.36	7.68	3.84	
				QPSK	10.24	5.12	2.56		
Output Level (dBmV)				20~45 Adjustable, 1dB Step		Receive Level (dBmV)		-13~+23	
Single Channel Symbol Rate	64QAM	6.952	5.056941	Single Channel Symbol Rate (Msymsps)	5.12		2.56	1.28	
	256QAM	6.952	5.360537						
	1024QAM*	6.952	5.360537						
Number of RF Port				1		1			
Reflection Loss (dB)				> 12		> 14			
Output Impedance (Ω)				75		Input Impedance (Ω)		75	
Management Method				1) Telnet Login , CLI Operate; 2) Network Management Software Based on SNMP; 3) Embedded Web, remote login					
Supported Protocols				Euro-DOCSIS/DOCSIS3.0/2.0, CDOCSIS, TCP/IP, ARP, L2VPN, ICMP, ACL, VLAN, Multicast, DHCP-rely, SNMP, etc.					
Physical Parameter									
WAN Port	Optical	1.25G SFP; 10G SFP+			Power Supply		AC90~230V 50/60Hz		
	Electronic	1000M Base-T ×2			Consume Power		< 45W		
RF Port		F type Socket ×2			Net Weight		3.0Kg		
Console Port		RJ45 Socket × 1			Working Environment		Temp.-25~55°C; HUM<90%		
Status Display		LED			Size (L×W×H) (mm)		440×285×45		

## Ordering Information

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Product Name	Product Description
C3000-CMTS-D-1-AC	C3000 1RU DOCSIS 3.0 CMTS 1DS, 1US port, AC Power Supply

## Contact Information

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