

# DB-CMTS8100

DIBSYS

## 1 RU MiniCMTS



The 1 RU chassis MiniCMTS product follows the DOCSIS 3.0 standard. Using the full DOCSIS 3.0, MiniCMTS and user devices fit the international DOCSIS standard, effectively meeting the technical standard of future DOCSIS. This product supports 16 downstream channels to 800Mbps; 4 upstream channels to 160Mbps, fulfilling the broadband access of 960Mbps. It can support 511 Cable Modems online simultaneously, fully compatible with the DOCSIS 2.0, 3.0 Cable Modem. This device is deployed in the front end, and completely replaces 1 RU CMTS.

The next generation DOCSIS 3.0 network uses this, mixing the advantage of broadcasting and flexible data interaction over an IP network, to promote the value of broadcasting HFC network, is the "trump card" of the Broadcasting access reform.

### 8 advantages

1. High standardized MiniCMTS series product fully compatible with DOCSIS standard, also compatible with DOCSIS 2.0/DOCSIS 3.0 Cable Modem.
2. High bandwidth: Highest to support 4 upstream QAM channels, bandwidth to 160Mbps; 16 downstream QAM channels, bandwidth to 800Mbps, total bandwidth to 960Mbps.
3. High QoS guarantee: DOCSIS can offer the high request of QoS guarantee, depend to fulfill the business of Voicing QoS request.
4. Support IPQAM function: Through the configuration, 16 downstream channels of DB-CMTS can be configured to 8 downstream channels used in data business which can be used to IPQAM VOD. As this time, the downstream bandwidth of DB-CMTS8100 is 400Mbps, used in IPQAM VOD bandwidth is up to 400Mbps. Meet the large scale of VOD, especially the HD VOD.
5. Achieve OLT and MTCS unified management. It is no need setting for installation and replacement. The equipment can auto complete configuration process when power up.
6. 3 in 1 product, integrated solution. To meet the individual needs of customers optional built-in optical receiver module, ONU module, IPQAM module. Realize optical node integrated type solution.
7. Perfect web management. B/S frame, graphical interfaces, fault alarm, convenient operation and maintenance.
8. Low cost: The transforming cost is almost 30%- 50% than big CMTS, equal to EPON+EOC.

## Features

- 19 inch standard 1U machine-case design
- 1 SFP interface and 2 RJ45 ports
- 1 100M LAN management interface
- 1 RF US and 1 RF DS, separately
- Support built in IPQAM module
- 4 channels QAM US, bandwidth is 160Mbps, 16 channels QAM DS, bandwidth is 800Mbps.
- Maximum output signal is 105dbuv
- Power supply is 220V/110V, less than 40W
- Upstream frequency range: 5-65Mhz
- down stream frequency range: 87~1000Mhz

## TECHNICAL SPECIFICATIONS

### DS channel specification

QAM standard	Annex A, B, C
QAM modulation	64QAM, 256QAM
Uni-channel speed	36M@64QAM 51M@256QAM
DS channels	16
DS maxi speed	800Mbps
Work frequency	87Mhz - 1000Mhz
Channel bandwidth	6 or 8Mhz
Input power	50dbmv ( 8 channels ) 45dbmv ( 16 channels )
Power adjusted step	0.5db
Post MER	42db
External noise	<-20dbm

### US channel specification

US channels	4
US modulation	QFSK, 16QAM, 64QAM
Uni-channel speed	0.32Mbps - 40Mbps
US maxi speed	160Mbps
Input frequency range	5Mhz - 65Mhz
Input level range	-13dbmv ~ 23dbmv

### RF output specification

RF IN interface	F connector, 75
RF IN quantity	1xRF up
RF OUT interface	F, 75
RF OUT amount	1xRFdown

### Data interface specification

Net port speed	10/100/1000Mbps
Net port type	2 RJ45 1 SFP
Full speed support	Support
Built-in ONU module	Not support

### Management specification

RS232 Serial	Support
Command line(CLI)	Support
Telnet or SSH	Support
SNMPv1, v2, v3	Support
DOCSIS MIBs	Support

### Other functions

Maxi CM amount	500
Dynamic load balance	Support
DHCP relay	option82, option60
Qos	Support
VLAN process	Support

### Environment

Work temperature	-25℃ - 75℃
humidity	10% - 90%
Alone supply	90 - 264V
Power	<35w
60V centralized supply	Not support
Size(mm)	483×410×43

## Related products

Product category	Product Model	Detail Description
Related Products	1 RU MiniCMTS <b>CMTS8100 Plus</b>	32 downstream QAM channels, bandwidth to 1600Mbps, 8 upstream QAM channels, bandwidth to 400Mbps/ 1*SFP interface and 2*RJ45 ports/ built in IPQAM module/ fully compatible with the DOCSIS2.0, 3.0 Cable Modem
	Compact Indoor CMTS <b>CMTS8210</b>	16 downstream QAM channels to 800Mbps; 4 upstream QAM channels to 160Mbps/1*SFP interface and 1*1000M LAN service port/Built-in CATV signal mixer, 2in 2out/fully compatible with the DOCSIS2.0, 3.0 Cable Modem
	Outdoor CMTS <b>CMTS8220</b>	16 downstream QAM channels to 800Mbps; 4 upstream QAM channels to 160Mbps/1*SFP interface or 1*1000M LAN service port/Built-in mixer, 1in 1 out, 2 in 2 out, 4 in 4 out optional, IPQAM module, ONU module/fully compatible with the DOCSIS2.0, 3.0 Cable Modem
Companion Products	DOCSIS 2.0 Cable Modem <b>CG212</b>	DOCSIS/Euro Docsis2.0/1.0/1.1 standard/Broadcom BCM3349 as main chipset/2*FE, WiFi optional/BPI/BPI+/connected up to 32 CPE devices'
	DOCSIS 3.0 Cable Modem <b>CG314</b>	DOCSIS/EURODOCSIS 3.0, Euro Docsis2.0/1.0/1.1 standard; Broadcom 33838M as main chipset/4*GE+2.4G WIFI/8 downstream and 4 upstream channels bonding/BPI/BPI+/connected up to 128 CPE devices