Mini-CMTS

JH-D2011m





Copyright 2011-11

Summary

Mini-CMTS, tailor made for distributed CMTS deployment which could be installed on those optical nodes located at housing estate, buildings, hospitals, and hotels and so on. It provides one more choice for operators. Mini-CMTS JH-D2011m derives its name from the exquisite volume (smaller than an A4 size paper). It is the mini version for Micro-CMTS.

Mini-CMTS is supported by matured DOCSIS standard, widely compatible, as flexible as EOC, cost effective, too. Its uplink port can connect either with Ethernet backbone or EPON.

The Mini-CMTS adapts 15V DC power supply; there is an external power supply adapter which could be fixed easily.

Appearance



Jeature

- Euro-DOCSIS/DOCSIS1.1, compatible with DOCSIS2.0/1.1/1/0 Cable Modem
- > 1 downstream channel, 1 upstream channel
- Built-in Full channel up converters, you may make any setting depends on practical needs according to the channel spare status
- > Built-in DHCP/TFTP server, no needs for other server
- DHCP relay-agent function, You can assign IP address for CM at the central machine room
- Upstream frequency point agility, the frequency jumping will be done automatically according to strategy to avoid the noise interference
- Upstream receiving power level adjustable: -10~+30dB
- Both CM & CPE could choose working mode at layer2, layer3 and even mixed mode of layer 2 & layer 3
- Support PPPoE dialup
- > Can be managed by CLI and SNMP via remote login

- > Very small size, could be easy fixed in metal box or hanging on the wall
- > Cost effective, come with convenient network management software (NMS)

Specification

		Downstream		Upstream		
		EURO DOCSIS1.1	DOCSIS1.1	Upst		Lream .
Modulation Mode		64QAM, 256QAM		Modulation Mode		QPSK, 16QAM
Frequency Range		112~858MHz Adjustable	91~587MHz Adjustable	Frequency Range		$5{\sim}65~{ m MHz}$
DS Bandwidth		8MHz	6 MHz	US Bandwidth		1.6MHz, 3.2MHz
Data Rate	64QAM	41Mbps	27 Mbps	Data Rate	QPSK	2560, 5120 Kbps
	256QAM	55 Mbps	38 Mbps		16QAM	5120, 10240 Kbps
Output Level		50dBmV		Receiving Level		-10~+30dBmV
Baud Rate	64QAM	6.952 Msymps	5.056941 Msymps	Baud Rate		1280, 2560Ksymps
	256QAM	6.952 Msymps	5.360537 Msymps			
Reflection Loss		>14dB		Reflection Loss		>14dB
Output Impedance		75 Ω		Input Impedance		75 Ω
Protocols Supported		Euro-DOCSIS1.1, DOCSIS1.1, ARP, RIPv2, ICMP, DHCP, TFTP, SNMP, PPPoE, DHCP Relay agent, Telnet etc.				
Physical Parameter						
RF interface		1 DS ,1US, metric F type port		Input Voltage		DC 14~22V
Network Interface		1 full duplex 100/10BaseT port		Power Consumption		18W
Power Supply Interface		4 cores Φ9 aviation plug		Net Weight		1.5Kg
Cooling		Fan		working condition		0∼50°C
Dimension		W211mm H63mm D150mm		Relative Humidity		<90%

Application

1. Installation

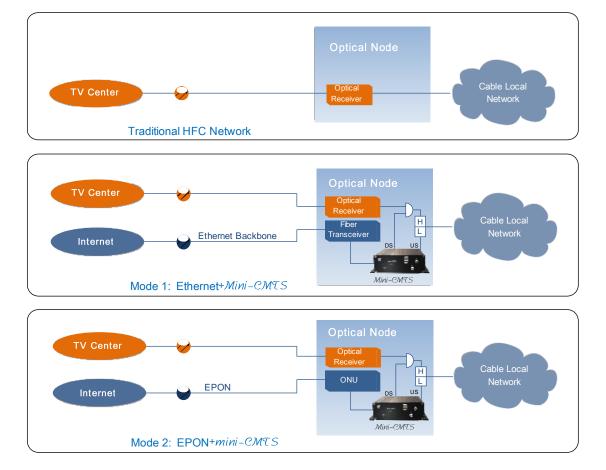
1) RF Port Connection

Install the Mini-CMTS into the simple machine room at the housing estate or CATV metal box, mix the Mini-CMTS DS signal with the TV optical receiver output signal then connect to HF (high frequency) port of the duplex filter. The LF (low frequency) port will connect to the US interface of the Mini-CMTS; the common port will be connected to the CATV cable network..

2) WAN Port Connection

The Mini-CMTS WAN ports can either uplink Ethernet backbone by fiber transceiver or uplink EPON backbone by ONU.

Please see the below figure.



Mini-CMTS Applications in HFC

2. Configurations

Please reference the user manual.