Broadband

# **EZ Connect**™ **DOCSIS 1.0 Compliant External**

**Cable Modem** 

Model Number:

SMC8002CM-US



The SMC EZ Connect' USB Cable Modem (SMC8002CM-US) is an external DOCSIS-based cable modem that provides high-speed Internet access to both the residential and the small and home office (SOHO) user. This new USB Cable Modem operates on two-way cable systems enabling higher performance with asymmetric connections of up to 40 Mbps per second downstream and 10 Mbps per second upstream. To provide this high-speed connection, this cable modem functions as a bridge between the cable network and the PC using either the standard Ethernet or USB interface providing maximum flexibility and ease of use.

The SMC EZ Connect' USB Cable Modem is fully compliant with Data Over Cable Service Interface Specification (DOCSIS) 1.0 thus ensuring compatibility

with a majority of the cable Internet providers. DOCSIS is the dominating cable modem standard and defines the technical specifications for both the cable modem and the Cable Modem Termination System (CMTS). By using this SMC DOCSIS certified modem you are ensuring a hassle-free installation. To provide a solid Internet connection, this USB Cable Modem includes SNMP Network Management support. The EZ Connect cable modem offers a Baseline Privacy feature that supports key management and encryption. To future-proof this modem, the EZ Connect USB Cable modem has an integrated upgrade option for new IP telephony technology improvements. Combine these features with SMC's service and support and you have the ideal solution for broadband access.

## Overview

## **Features**

- Complies with DOCSIS 1.0 cable modem requirements. Concurrent USB and Ethernet Support
- Software upgradeable to DOCSIS
  1.1 with no hardware changes
- Up to 40Mbps downstream and 10Mbps upstream
- Supports SNMP management
- Supports up to 16 simultaneous users
- Comprehensive LED display for easy installation and monitoring
- · Built-in universal power supply

## **Benefits**

- Fully interoperable with all DOCSIS cable networks
- Concurrent support allows two PCs to simultaneously access the Internet
- Expand your network with a hub or switch
- Running Internet interactive multimedia applications has never been easier
- Manage the modem remotely, limit costly truck rolls
- Connect to a hub or switch and extend your network connection up to 16PCs
- No cumbersome power supply

## Compatibility

- DOCSIS 1.0
- IEEE 802.3
- IEEE 802.3u
- USB 1.1



## **EZ Connect**™ **DOCSIS 1.0 Compliant External**

## Cable Modem

## SMC8002CM-US

## **Operation Frequency**

 Downstream: 91-857MHz Upstream: 5 -42MHz

## Frequency Selection

 Downstream: Auto Scanning; Controlled by

TFTP/SNMP

Controlled by Upstream:

UCC/UCD/TFTP/SNMP

## **Bandwidth**

 Downstream: 6MHz

200 kHz, 400 kHz, 800 kHz, • Upstream:

1.6 kHz, 3.2 kHz

## Demodulation

64QAM, 256QAM Downstream: Upstream: QPSK, 16QAM

## Physical Speed

 Downstream: 30Mbps (64QAM), 42Mbps

(256QAM)

• Upstream: 320...5120 Kbps (QPSK), 640...

10240 Kbps (16QAM)

## Signal Level

 Downstream: Single Channel; -15 dBmv ~

+15 dBmv,

< +30 dBmv Total:

+8 dBmv ~ +58 dBmv (QPSK), • Upstream:

+8 dBmv ~ +55 dBmv

(16-QAM)

## **Error Correction**

 Downstream: ITU-T J.83 Annex B

DOCSIS upstream FEC with • Upstream:

scalable interleaving

## **Bit Error Rate**

1x10-8 at C/N=23.5dB, 64QAM with FEC

1x10-8 at C/N=30dB, 256QAM with FEC

## **Network Protocol**

 Ipv4/ARP/ICMP/UDP/IGMPv2/DHCP/TFTP/ SNMPv2

## **Ethernet Bridge**

· Transparent Bridging for IP Packet

## **Packet Filtering**

 Uni/Multicast Cable MAC address/Ethernet Address

## **Security and Encryption**

· Baseline Privacy, meets the requirement of DOCSIS 1.0

## **Standard Compliance**

• MCNS DOCSIS 1.0, Ethernet IEEE 802.3, Ethernet IEEE 802.3u, USB Rev1.1

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## **Ethernet Connection Interface**

• RJ-45 10/100BaseTX Connector

#### USB

Rev.1.1, 12Mbps

### **RF Connection**

· Female F type

• Power, ETH Link, Cable ACT, E/USB ACT

### Dimension

• 22.9 x 5.08 x 15.74 cm (9.0" x 2" x 6.2 in.)

#### Weight

· 700g (24.69 oz.)

## **Electrical Specification**

 Input Power: 100 ~240 VAC, 50/60 Hz

## **Power Consumption**

· 12-Watts maximum

## **Environment: operating conditions**

 Temperature: 32° - 104° F (0° to 40°C)

 Humidity: 10% to 95%, non-condensing

Certification

· Immunity: EN 61000-4-2/3/4/5/6/8/11

· Emissions: FCC Class B, CISPR Class B,

EN 61000-3-2/3

Safety: UL1950, CB, CCIB

## Warranty

· Limited Lifetime

Product	Description
SMC8002CM-US	DOCSIS 1.0 Compliant External Cable Modem for
	High-Speed Broadband Networking