TOUCHSTONE™
CABLE MODEM 450B

APPLICATION
The Touchstone Cable Modem 450B is EuroDOCSIS 2.0 based (Euro-DOCSIS 1.1 Certified now) cable modem that delivers advanced high-speed data services over hybrid fiber/coax (HFC) networks.

BENEFITS
- Helps minimize operating expense due to EuroDOCSIS 2.0 compliance
- Attractive, compact design
- Enables operators to expand revenues by offering high-speed data at tiered price and performance levels

FEATURES
- Euro-DOCSIS 2.0 based to support increased upstream bandwidth utilization
  - Euro-DOCSIS 1.1 Certified now
- Supports tiered data services
- Offers high-speed data services via bridged 10/100 Base-T Ethernet and full speed (12 Mbps) Universal Serial Bus (USB) 1.1
- Compact size minimizes space requirements
- Easy to understand visual indicators reduce subscriber diagnostic needs
- Easily accessed standby option suspends connection to PC but maintains connection to operator’s CMTS to preserve subscriber’s LAN while isolating from the outside HFC network
- Horizontal or vertical mounting options – built-in swivel stand for vertical desktop use and built-in bracket for wall mounting
- Locally powered
- Superior data throughput
- Installation assistance via Touchstone exclusive web server
### SPECIFICATIONS

#### Physical
- **Operating Temperature °F (°C)**: 41 to 104 (5 to 40)
- **Storage Temperature °F (°C)**: -40 to 158 (-40 to 70)
- **Relative Humidity (Min.-Max.) (Non condensing)**: 5-85%
- **Color**: Dark Grey
- **Dimensions (H x W x D) in. (cm)**: 6.8 x 6.4 x 1.2 (17.2 x 16.3 x 3.0)
- **Weight lbs. (kg)**: .8 (350)
- **Diagnostic LEDs**: Power, On-line, Cable, USB, Ethernet

#### Interfaces
- **RF Interface**: F-type
- **Data Interfaces**: 10/100 Base-T Ethernet (RJ-45 connector), USB 1.1 Series B connector
- **Input Power**: 200-240 V ac, 50/60 Hz, 9 Watts
- **User Switch**: Standby

#### RF
- **Downstream**
  - **Frequency Range (MHz)**: 108-862
  - **Bandwidth**: 8
  - **Modulation (QAM)**: 64 or 256
  - **Data Rate (Mbps) (Max.)**: 51
  - **Input Impedance (Ohms)**: 75
  - **RF Input Sensitivity Level (dBmV)**: -13 to +17 (256QAM) or -17 to +13 (64QAM)

- **Upstream**
  - **Frequency Range (MHz)**: 5-65
  - **Bandwidth**: A-TDMA: 200, 400, 800, 1600, 3200 & 6400 KHz  
    S-CDMA: 1600, 3200 & 6400 KHz
  - **Modulation**: QPSK, 8QAM, 16QAM, 32QAM, 64QAM & 128 QAM (S-CDMA only)
  - **Data Rate (Mbps) (Max.)**: up to 30.72 Mbps
  - **RF Output Level (dBmV)**: A-TDMA: +8 to 54 dBmV (32,QAM, 64QAM)  
    +8 to 55dBmV (8QAM, 16QAM)  
    +8 to 58 dBmV (QPSK)  
    S-CDMA: +8 to +53 dBmV (all modulations)
  - **Automatic Level Adjust**: Yes
  - **Gain Control Range (dB)**: 50
  - **Frequency Stability (kHz)**: +/- 5
  - **Output Impedance (Ohms)**: 75

#### Standards
- **Euro-DOCSIS 2.0 based**
- **Euro-DOCSIS 1.1 Certified**
- **UL 60950**
- **FCC Part 15 Class B**
- **CE**
- **WHQL**

### ORDERING INFORMATION

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Specifications are subject to change without notice.