



ASMi-450

HDSL High Speed Modem

FEATURES

- High-speed data transmission range over 2-wire lines
- HDSL technology for extended range
- Selectable data rates up to 1152 kbps
- Range up to:
5.7 km / 3.5 miles at 768 kbps
4.7 km / 2.9 miles at 1152 kbps over 24 gauge wire
- Reliable performance over poor/noisy lines
- Digital interfaces: V.35, V.36/RS-449, X.21 or RS-530
- In-band channel for remote control, monitoring and diagnostics
- Monitoring, control and diagnostics via front panel or supervisory port

DESCRIPTION

- The ASMi-450 high speed HDSL modem transmits high-speed data over 2-wire lines using HDSL technology. It operates synchronously full duplex at data rates up to 1152 kbps, and is suitable for local loop and campus point-to-point applications.



- ASMi-450 provides reliable performance over poor quality and noisy lines. The HDSL line interface includes: adaptive equalizer, filtering, echo cancellation and 2B1Q line code. The line interface is designed in accordance with relevant ANSI and ETSI standards.
- ASMi-450 is available in two versions for optimized performance at different data rates (*See Ordering*):
 - **ASMi-450/768**
for n x 64 up to 768 kbps (5.7 km / 3.5 miles)
 - **ASMi-450/1152**
for n x 64 up to 1152 kbps (4.7 km / 2.9 miles)
- The ASMi-450 digital interface options include V.35, V.36, X.21 and RS-530 (*See Ordering*).
- Three selectable transmit timing modes are available:
 - *Internal*, using an internal clock
 - *External*, derived from the attached digital interface, or
 - *Receive* timing derived from the received signal of the HDSL line.
- Monitoring, control and diagnostics of local and remote units are available via the front panel LCD display, or via the supervisory port. Configuration, control and diagnostics of the remote ASMi-450 unit are available via the on-line operation channel. This channel enables real time control and diagnostics of the remote unit.
- ASMi-450 contains an SNMP agent which can be managed from the RADView-HPOV station either as a stand-alone or when accommodated in the LRS-12 rack.
- The unit features diagnostic capabilities to perform local analog loopback and remote digital loopbacks. The loops can be activated manually from the front panel or via control signals from the interface connector.
- ASMi-450 is available as a stand-alone unit or as a card for the LRS-12 19" rack. The rack can carry up to 12 ASMi-450C cards. Optional rackmount hardware is also available for mounting one or two stand-alone units in a 19" rack.

SPECIFICATIONS

■ HDSL Interface

Line type: One unconditioned unloaded twisted pair (2-wire)

Range:

over 24 gauge wire (0.5 mm)
768 kbps - 5.7 km/3.5 miles
1152 kbps - 4.7 km/2.9 miles)

Transmit signal power:

+13 dBm (±1dBm)

Transmit pulse shape:

as per ETSI DTR/TM 3017
and ANSI T1E1.4/92-002RI

Impedance: 135Ω

Return loss:

16 dB min, 40 kHz to 200 kHz
at 135Ω (768 kbps)
16 dB min, 25 kHz to 317 kHz
at 135Ω (1152 kbps)

Loop loss:

35 dB max at 200 kHz
(768 kbps)
31 dB max at 150 kHz
(1152 kbps)

Line code: 2B1Q

Equalizer: automatic adaptive

Noise margin:

6 dB at 768 kbps
3.3 dB at 1152 kbps

Connector: RJ-45

■ Digital Interface

Type: V.35, RS-530, V.36/RS-449
or X.21 (See Ordering)

Bit rate:

n x 64 up to 768 kbps or
n x 64 up to 1152 kbps
(See Ordering)

Connectors:

V.35: 34-pin, female

V.36/RS-449: 37-pin D-type,
female (through an adapter
cable provided with the
product)

RS-530: 25-pin D-type, female
X.21: 15-pin D-type, female

■ Supervisory Port

Connector: 9 pin D-type, female
Interface: V.24/ RS-232

■ Diagnostics

Local analog loopback: activated
by front panel menu or by DTE
interface signal

Remote digital loopback: activated
by front panel menu or by DTE
interface signal

■ Timing Element

Receive clock: derived from the
receive signal

Transmit clock: derived from three
selectable sources:

- Internal oscillator
- External from the attached
DTE
- Receive from the HDSL line
receive signal

■ Indicators

Transmit Data (TD)
Receive Data (RD)
HDSL Sync Loss (LOS)
HDSL Quality (QLTY)
Test mode (TST)
Alarm (ALM)

■ Physical

Height: 4.3 cm / 1.7 in
Width: 21.5 cm / 8.5 in
Depth: 24.3 cm / 9.5 in
Weight: 1.5 kg / 3.5 lb

■ Power Supply

100 - 230 VAC (±10%)
47 to 63 Hz; 5W, or
-48 VDC

■ Environment

Temperature: 0°-50°C/32°-122°F
Humidity: up to 90%,
non-condensing

ORDERING

ASMi-450/*/#/&

High Speed Modem stand-alone unit

ASMi-450C/*/#/&

High Speed Modem card for the
LRS-12 19" rack

* Specify supply voltage:

115 for 115 VAC

230 for 230 VAC

48 for -48 VDC

Specify data rate:

768 for rates up to 768 kbps

1152 for rates up to 1152 kbps

& Specify interface:

V35 for V.35

V36 for V.36/RS-449

X21 for X.21

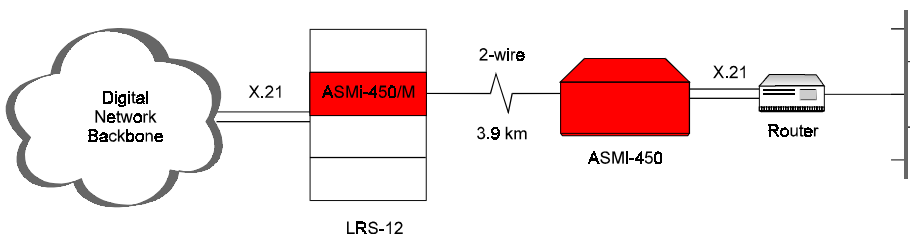
530 for RS-530

RM-17

Special hardware for mounting one or
two ASMi-450 units in a 19" rack

Specifications are subject to change without prior notice.

APPLICATION



Order from: Cutter Networks

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data communications

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