The Model 1052AS miniature digital modem offers multi-rate Async/Sync speeds to 38.4/128 kbps while transparently passing modem control signals. This 2-wire full-duplex modem uses 2B1Q modulation for superior noise immunity.

RS-232 Serial Extender

Patton Model 1052AS

Patton's Model 1052AS is a long-range powered, RS-232 digital modem. Operating synchronously or asynchronously at full duplex over a single twisted pair, the Model 1052AS uses 2B1Q modulation for superior signal strength even in noisiest environments. RS-232 serial connections can now be extended to distances over 5 miles (8 km) without the use of repeaters! Using ordinary voice-grade wire, the 1052AS RS-232 Serial Extender provides a cost-effective solution for dedicated end-to-end connections with synchronous line rates up to 128 kbps and asynchronous line rates up to 38.4 kbps including RTS, CTS and DCD modem signals.

The miniature size of the Model 1052AS allows for a direct connection to your transmission devices serial port. LEDs are conveniently located on the side of the Model 1052AS to provide at-a-glance status indication of the unit. Additionally, two 8-position DIP switches are located at the bottom of the unit to allow the configuration of various asynchronous or synchronous line rate settings.

For more information, visit us at www.patton.com.

Multi-Rate Speeds
Full-duplex synchronous rates to 128 kbps and asynchronous rates to 38.4 kbps.

Noise Immunity
The 1052AS uses 2B1Q for improved performance in noisy environments.

Pass RS-232 Control Signals
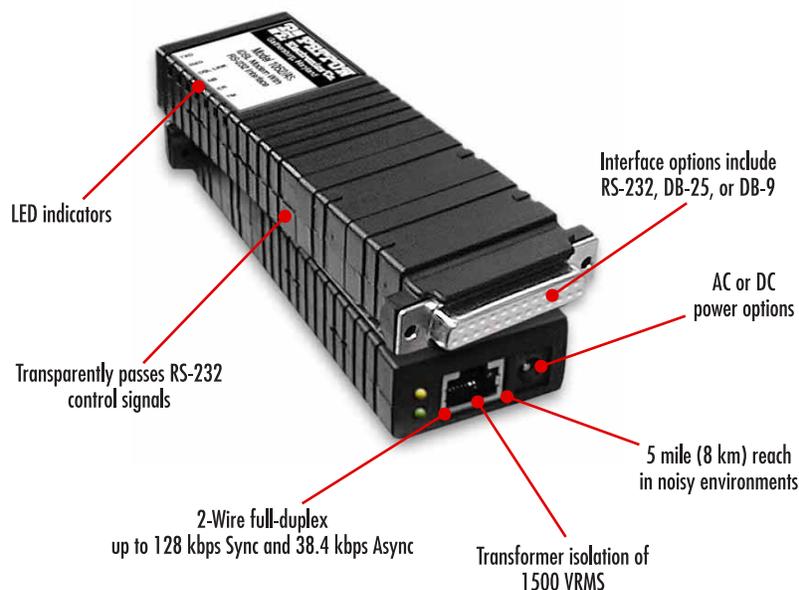Transparently passes CTS, RTS, and DCD over the 2-wire line.

Long Reach
Industry leading distances of over 26,000 feet (8 km) without repeaters.

Power Options
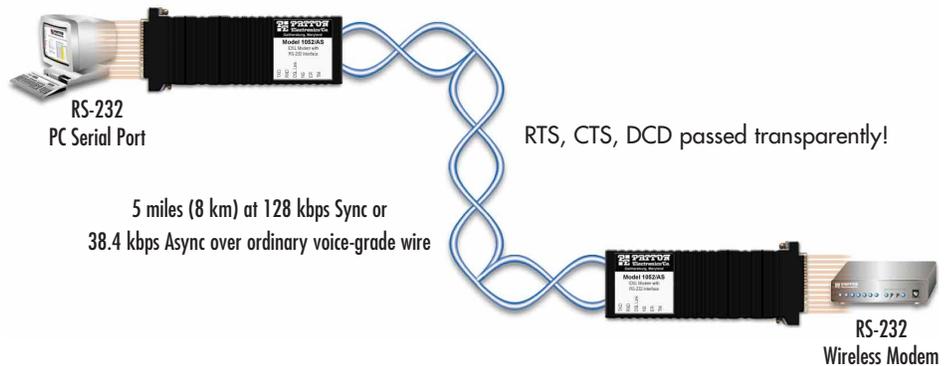Universal AC power (90–260 VAC) as well as -12, -24, & -48 VDC.

PATTON

LED indicators

Transparently passes RS-232 control signals

2-Wire full-duplex up to 128 kbps Sync and 38.4 kbps Async

Interface options include RS-232, DB-25, or DB-9

AC or DC power options

5 mile (8 km) reach in noisy environments

Transformer isolation of 1500 VRMS

Features

✔ Extends serial devices up to 5 miles (8 km) over ordinary grade twisted pair

✔ Miniature size for direct connections to your serial port

✔ 2B1Q modulation enhances signal immunity in noisy environments and increases the distance of RS-232 signals.

✔ Multiple user-configurable asynchronous and synchronous rate options

✔ Transparently passes RS-232 control signals over the link.

Typical Application

The Patton Model 1052AS offers premium performance using the most common, inexpensive cabling infrastructure in the world, voice grade telephone wire. Using 2B1Q modulation a serial port can be extended to distances of over 5 miles (8 km).

RS-232
PC Serial Port

RTS, CTS, DCD passed transparently!

5 miles (8 km) at 128 kbps Sync or
38.4 kbps Async over ordinary voice-grade wire

RS-232
Wireless Modem

Specifications

Clocking	Internal, external, or receive recover.	**Weight**	2.01 lbs. (<1.0 kg)
Line Coding	2B1Q conforming to ANSI T1.601 and ETSI ETR-080 standards.	**Compliance**	**EMC**
Line Interface	RJ-45; Two-wire twisted-pair using pins 4 & 5; Transformer coupled 1500 VRMS isolation		• FCC Part 15, subpart B, class A (US)
Maximum Line	10.1 miles (16.4 km) on 19 AWG (0.9 mm) wire		• EMC Directive 89/336/EEC (EU)
Distance for All	7.2 miles (11.5 km) on 22 AWG (0.64 mm) wire		• ICES-003 (Canada)
Data Rates	5.0 (8 km) on 24 AWG (0.5 mm) wire		• AZ/NZS 3548 (Australia C-Tick)
	3.4 (5.5 km) on 26 AWG (0.4 mm) wire		• CISPR 22 (International)
Serial Interface	DB-25 Female or DB-9 Female depending on model ordered.		**Safety**
Serial Data Rates	**Synchronous:** 32, 56, 64, and 128 kbps		• UL 60950/CAN-CSA-C22.2 60950 (Safety—US/Canada)
	Asynchronous: 0—38.4 kbps.		• EN 60950 (Safety—Europe/International)
LED Indicators	TXD, RXD, Link, NS (no signal), ER (CRC error)	**Environment**	**Operating temperature:** 32–122°F (0–50°C)
Power Supplies	External wall-mount power supply with universal 90—260 VAC input or -12,-24, and -48 VDC input		**Humidity:** 5–95% non-condensing
Dimensions	5.18L x 1.69W x 0.75H in. (13.16L x 4.29W x 1.91H cm)		**Altitude:** 0–15,000 feet (0–4,572 meters)

07MD1052AS-DS1