

M2000

RS-485 Repeater



The M2000 is an RS-485 repeater that operates on 10–30VDC. It is ideal for supporting RS-485 networks of up to 32 devices including M-1000/2000/3000/4000 Series Programmable Signal Conditioning modules. The M2000 converter allows communications bus lengths up to 4000 feet and data rates up to 115K baud using one twisted pair of wires. The M2000 automatically controls bus direction allowing host software written for full-duplex RS-232 to be used without modification. Optical isolation up to 1500VAC protects your PC from shorts on the network. Series thermistors provide internal surge protection on the data lines.

- Completely transparent to host software
- No external flow control signals required
- Optically-isolated bidirectional data flow
- Standard baud rates: 300 to 115Kbaud
- Automatic internal RS-485 bus supervision
- Networking up to 4,000 meters
- Transient suppression on RS-485 data lines
- Internal jumper selectable termination resistors
- Internal 1k Ω biasing resistors on RS-485 data lines

Ordering Information

M2000	RS-232/RS-485 Converter/Repeater, 10–30 VDC power
M2000-PS	12VDC @ 3A Power Supply for the M2000
CM1000/9	Cable, DB-9 female to DB-9 male, 3m (10 ft)
CM1000/25	Cable, DB-25 female to DB-9 male, 3m (10 ft)

SPECIFICATIONS

MAX. COMMON MODE VOLTAGE: 1500V rms, 1 minute duration.

BAUD RATES: 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200.

POWER REQUIREMENTS: +10 to +30VDC unregulated.

POWER CONSUMPTION: 1.5W max. (RS-485 driver on); 0.2W max. (idle, LEDs off).

DIMENSIONS: 7.06 in W \times 1.53 in H \times 5.30 in D.

TEMPERATURE: –25° to 70°C.

RELATIVE HUMIDITY: 0%–95% non-condensing.

RS-485 CONNECTIONS: Phoenix screw terminal barrier plug (supplied). Replace with Phoenix MSTB 2.5/4 ST 5.08 or equivalent.

RS-232 CONNECTION: DB-9 female.