

Signal Converters and Repeaters

For D1000 and D2000 Digital Transmitters



Shown smaller than actual size.

- ✓ Fully Adjustable Baud Rates
- ✓ Integral 24 V, 1 A Power Supply Can Power up to 32 Transmitter Modules (A1000 Only)
- ✓ Repeater Function Amplifies RS-485 Signal to Drive 32 Additional Modules
- ✓ Optically Isolated Bi-directional Data Flow



Rear View

The A1000 and A2000 signal converters allow users to establish an effective data acquisition system over long distances. These converters change RS-232 communication signals to RS-485, to accommodate remote field communications, allowing bus lengths to 4,000 feet and baud rates to 115k.

RS-485 is a true transmit/receive bus, which requires some means of controlling the bud direction. The A1000 automatically performs this task, eliminating any handshaking from the host . Thus, any software written for RS-232 or RS-485 may be used without modification. The RS-485 bus control is completely transparent to the user.

The A1000 also contains a 24 V, 1 A power supply capable of powering up to 32 transmitter modules. The supply is fully protected against overloads and short circuits. The power supply may also be used to power accessory circuits such as relays or 4 to 20 mA transmitters. The A1000 and A2000 can also be used as RS-485 repeaters. A repeater simply re-amplifies, or boosts, existing RS-485 signals transmitted over long distances. The A1000 is available with either 115 or 230 Vac power, while the A2000 can be powered by 10 to 30 Vdc.

From
\$200



Specifications

Max. Common Mode Voltage: 1500 Vrms, 1 min duration

Baud Rates: 300, 600, 1200, 2400, 4800, 9600, 19.2k, 38.4k, 57.6k, 115.2k

Temperature Range: -25 to 70°C (-13 to 158°F), operating and storage

Relative Humidity: 0 to 95% non-condensing

Case: impact resistant ABS

Dimensions: 63.5 H x 205 W x 159 D cm (2.5" x 8.08" x 6.25"), A1000; 39 H x 179 W x 135 D cm (1.53" x 7.06" x 5.3")

Weight: 1.3 kg (2.8 lb), A1000; 0.45 kg (1.0 lb), A2000

A1000 Power Specifications

Power Requirements: 115 or 230 Vac \pm 10%, 50-60 Hz

Power Consumption: 30 W full load

Power Supply Output: +24 Vdc @ 1 Amp

A2000 Power Specifications

Power Requirements: 10 to 30 Vdc unregulated

Power Consumption: 1.0 W max (RS-485 driver on); 0.2 W max (idle, LEDs off)

MOST POPULAR MODELS HIGHLIGHTED

To Order (Specify Model No.)

Model No.	Price	Description
A1000	\$250	RS-232 to RS-485 Converter, 115 Vac power
A1000-230	250	RS-232 to RS-485 Converter, 230 Vac power
A2000	200	RS-232 to RS-485 Converter, 10-30 Vdc power

Each unit supplied with operator's manual.

Ordering Example: A1000 RS-232 to RS-485 converter, 115 Vac power, and OMEGACARESM 1-year extended warranty for A1000 (adds 1 year to standard 1-year warranty), \$250 + 25 = \$275.



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• Flow and Level

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• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters