

Signal Converters and Repeaters For D1000 and D2000 Digital Transmitters



A1000 and A2000



- ✓ Fully Adjustable Baud Rates
- ✓ Integral 24 V, 1A Power Supply Can Power up to 32 Transmitter Modules (A1000 Only)
- ✓ Repeater Function Amplifies RS485 Signal to Drive 32 Additional Modules
- ✓ Optically Isolated Bi-directional Data Flow

The A1000 and A2000 signal converters allow users to establish an effective data acquisition system over long distances. These converters change RS232 communication signals to RS485, to accommodate remote field communications, allowing bus lengths to 4000 feet and baud rates to 115k.

RS485 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 RS232 or RS485 may be used without modification. The RS485 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 RS485 repeaters. A repeater simply re-amplifies, or boosts, existing RS485 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.



All models shown smaller than actual size.



Specifications

Maximum Common Mode Voltage: 1500 Vrms, 1 minimum 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 maximum (RS485 driver on); 0.2 W maximum (idle, LEDs off)



OMEGACARESM extended warranty program is available for models shown on this page. Ask your sales representative for full details when placing an order. OMEGACARESM covers parts, labor and equivalent loaners.

To Order

Model No.	Description
A1000	RS232 to RS485 Converter, 115 Vac power
A1000-230	RS232 to RS485 Converter, 230 Vac power
A2000	RS232 to RS485 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 OCW-1, OMEGACARESM extends standard 1-year warranty to a total of 2 years.