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 bus 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.