



## DIN-190 SERIES RS-232/RS-485 CONVERTERS and RS-485 REPEATERS



### FEATURES

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

### APPLICATIONS

- Interface DGH RS-485 modules to any RS-232 port.
- Expand existing RS-485 networks.
- Portable data acquisition systems.

### GENERAL DESCRIPTION

The DIN-190 series consists of the DIN-191 RS-232/RS-485 converter and the DIN-192 RS-485 repeater. The DIN-191 converters allow communications bus lengths up to 4,000 feet and baud rates up to 115K baud using one twisted pair of wires.

The RS-485 standard allows for bidirectional data on the same pair of wires. Therefore, some means of arbitrating the data direction is required. The DIN-191 automatically control the bus direction without external handshaking signals from the host. Therefore, host software written for half-duplex RS-232 may be used without modification. RS-485 bus control is completely transparent to the user.

The DIN-192 RS-485 repeater reamplifies, or boosts, existing RS-485 signals transmitted over long distances. Repeaters are required to extend communications bus lengths or to allow more than 32 RS-485 devices to be connected to a communications bus.

Both the DIN-191 and DIN-192 operate on +5Vdc power supply input voltage.

