EIA-485 / RS-232 Communications Adapter

Morningstar’s EIA-485 / RS-232 Communications Adapter (RSC-1) enables networking capability by converting a controller or inverter’s RS-232 port to a standard EIA-485 serial connector. The RSC-1 may be used with any Morningstar controller or inverter equipped with a RS-232 port.

By converting to EIA-485, the RSC-1 allows up to 128 Morningstar products to communicate on the same communication bus and over much greater distances. Typical configurations include:

- Networking several TriStar and/or TriStar-MPPT controllers
- Adding Morningstar’s PC Meterbus Adapters (MSC) for use with an RJ-11 port in multi-device networks.
- Adding Morningstar’s Relay Driver to a network
- Integrating any compatible Morningstar product into an existing EIA-485 network, such as those used by industrial control or SCADA systems.

All data is transmitted in the form of MODBUS protocol. This industry standard was chosen for its robust design and high level of compatibility with a variety of equipment. Each Morningstar product has its own MODBUS specification (see our website for full details) that covers the data available from each products specific functions.

Key Features

- Removable four (4) position EIA-485 terminal
- 9-pin RS-232 connector (male)
- Status LED for monitoring and diagnostics
- Molded tabs for attachment to 35mm standard DIN rail
- RS-232 ribbon cable (not shown) with low-profile connectors

Technical Specifications

- Power Input Voltage: 8V – 16V
- Self Consumption: 8-16mA
- Baud Rate: 9600 baud
- EIA-485 Network Unit Load: ¼
- Operating Temperature: -40C to +60C
- Storage Temperature: -55C to +80C
- Humidity: 100% N.C.
- Enclosure: IP20
- Dimensions: 72 x 35 x 23mm
- Weight: 37 g (1.3 oz)
- DIN Rail Compatibility: 35 mm (1-3/8”)
- Certifications: CE, RoHS

Example of EIA-485 Network

[Wiring diagram showing the connection of various Morningstar products through the EIA-485 adapter]

WARRANTY: Five year warranty period. Contact Morningstar or your authorized distributor for complete terms.

AUTHORIZED MORNINGSTAR DISTRIBUTOR:

©2009 Morningstar Corporation PRINTED IN USA 225E-REV1- 9/09