DATA-LINC GROUP

ENGINEERING SPECIFCATIONS

MDL500FSK

MDL500 Frequency Shift Key Wire Modem

Contact Data-Linc Group for the latest updates to Specifications

General Specifications

- The FSK Industrial Modem shall operate simplex, half-duplex and full-duplex over non-switched private and non-loaded lines or any dedicated two conductor wire, twisted or untwisted, shielded or unshielded.
- The FSK Industrial Modem must have the capability of operating at an uncompressed data rate of 9600 baud in full-duplex mode, transmitting and receiving at a range of up to 4 miles (A high power version capable of an 8 mile range should be optionally available) on 24 gauge or larger two conductor wire (smaller gauge wire may be used but will reduce the range capability).
- The FSK Industrial Modem shall utilize pure FSK (Frequency Shift Key) technology to provide immunity from electromagnetic interference, surge and noise problems as well as providing transformer and capacitor isolation between the data transmission line and ground, thereby eliminating any possibility of ground loop or ground plane shift problems.
- The FSK Modems and connecting cables must be factory configured to provide simple installation (custom factory pre-configured- no modem field settings, programming or adapters required).
- The FSK Modem must meet or exceed industrial operating specifications of 0° C to +60° C (32° F to +140° F) and 0-95% non-condensing humidity.
- The FSK Modems will operate with a 120 VAC to 24 VDC wall mount transformer and draw no more than 180 mA.
- The FSK Modem must be able to transparently accept any asynchronous serial data stream and interface to RS232/422/485. Mating connectors shall be two position pluggable terminal blocks to FSK data transmission line as well as DB25 for digital interface.
- For maximum EMI/RFI immunity, the FSK Modem must be housed in a metal enclosure and provide mounting flanges for ease of installation. Indicator LEDs' shall include at a minimum: Power, Carrier, Data In and Data Out.
- The FSK Wire Modem shall also be optionally capable of, if desired, superimposing data on in-plant AC/DC power lines, PBX telephone wires or instrumentation lines providing the simultaneous transmission of data with existing power, voice or instrument loop transmissions, thereby eliminating the time and expense of separate data cable installation.
- The FSK Industrial Modem shall support point-to-point and multi-point as well as data rate and protocol transparency. Turn around delay shall be 20 ms or less in multi-drop, carrier control mode.
- The FSK Industrial Modem shall also optionally permit the reliable transmission of data over sliding contacts including slip rings and rolling wheels, as well as brushes and shoes, on conductor bars.

The FSK Industrial Modem must be model #MDL500 from Data-Linc Group or approved equivalent.

Alliance Partners

DATA-LINC GROUP

3535 Factoria Blvd. SE
Suite 100
Bellevue, WA 98006 USA
info@data-linc.com

Tel: (425) 882-2206
Fax: (425) 867-0865

www.data-linc.com

Specifications subject to change without notice

P/N 158-09939-001 rev 11/04