

500-Series Communication Cards

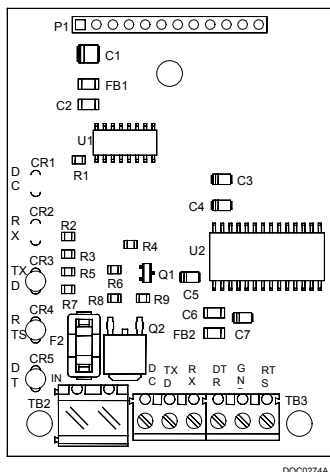
The 500-Series Communication Cards support either serial or dial-up communications between a FloBoss™ 503, 504, or 553 Flow Manager, and another device, typically a host computer. They support Spontaneous-Report-By-Exception (SRBX) messaging to a host. Three types of communication cards are available:

- ◆ EIA-232D (RS-232D) card for asynchronous EIA-232 serial communications over twisted-pair lines of up to 15 m (50 ft) in length. Under control of the FloBoss 500 unit, this card has the ability to switch external power to communication devices up to 3.5 A, such as a radio, to conserve power.
- ◆ EIA-485 (RS-485) card for asynchronous EIA-485 serial communications over twisted-pair lines of up to 1220 m (4000 ft) in length.
- ◆ Dial-Up Modem card for sending and receiving signals over a 2-wire, full-duplex telephone network (PSTN) at 1200 and 2400 baud. Both auto-dial and auto-answer features are accommodated.

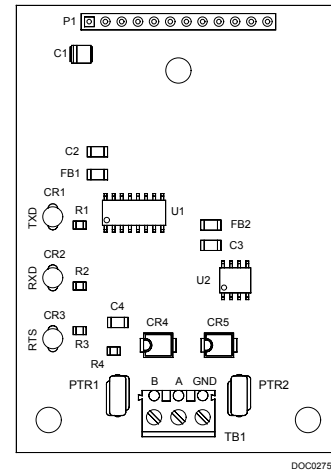
Either a serial or modem communication card can be installed in a FloBoss 503 or 504 unit. Only a serial communication card can be installed in a FloBoss 553 unit, due to its Class I, Division 1 rating.

Each communication card plugs into the main board of the FloBoss unit, which provides power and control signals. The communication cards have LED indicators for the various communication signals.

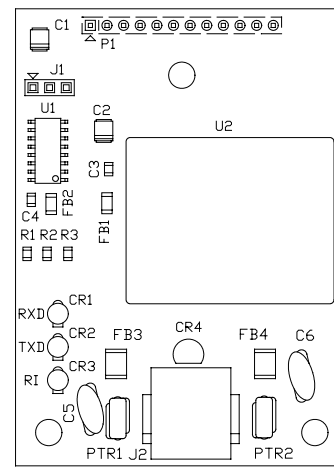
Electrical connections to an external device are made by means of screw terminals on the serial cards. The dial-up modem card interfaces to a telephone network through a TELCO (RJ11) connector on the card.



EIA-232 Communication Card



EIA-485 Communications Card



Dial-Up Modem Card

Specification Sheet

Serial Card Specifications

EIA-232D CARD

Meets EIA-232 standard for single-ended data transmission over distances of up to 15 m (50 ft).

Data Rate: Selectable from 1200 to 19.2k baud.

Format: Asynchronous, 7 or 8-bit (software selectable) with full handshaking.

Parity: None, odd, or even (software selectable).

EIA-485 CARD

Meets EIA-485 standard for differential data transmission over distances of up to 1220 m (4000 ft).

Data Rate: Selectable from 1200 to 19.2k baud.

Format: Asynchronous, 7 or 8-bit (software selectable).

Parity: None, odd, or even (software selectable).

LED INDICATORS

Individual LEDs for RXD, TXD, and RTS signals. EIA-232D card also has LEDs for DTR and DCD.

POWER REQUIREMENTS

4.75 to 5.25 Vdc, 0.03 W maximum, supplied by processor board.

ENVIRONMENTAL

Operating Temperature: -40 to 75°C (-40 to 167°F).

Storage Temperature: -50 to 85°C (-58 to 185°F).

Operating Humidity: To 95% relative, non-condensing.

DIMENSIONS

18 mm H by 51 mm W by 70 mm L (0.7 in. H by 2.0 in. W by 2.75 in. L).

APPROVALS

Approved by CSA for hazardous locations Class I, Division 2, Groups C and D.

Dial-Up Modem Card Specifications

OPERATION

Mode: Full-duplex 2-wire for dial-up PSTN (Bell 212 compatible).

Modem Protocols: Bell 212A, Bell 103, V.22bis, V.22, V.21.

Data Rate: 1200, or 2400 baud asynchronous (software selectable).

Parity: None, odd, or even (software selectable).

Format: 8, 9, 10, or 11 bits, including start, stop, and parity (software selectable).

Transmit Carrier Frequencies: Originate, 1200 Hz ± 0.1%; Answer, 2400 Hz ± 0.1%.

Receive Carrier Frequencies: Originate, 2400 Hz ± 7 Hz; Answer, 1200 Hz ± 7 Hz.

Telephone Line Impedance: 600 ohm typical.

RTS to Transmission Delay: Configurable in 50 millisecond periods (software selectable).

Receiver Sensitivity: On hook, Type B ringer, 38 Vrms.

Maximum Output Level: 0 dBm nominal into 600 ohms.

LED Indicators: TXD, RXD, and RI (Ring).

OPERATION (CONTINUED)

Surge Protection: Conforms to FCC part 68 and DOC.

Surge Isolation: 1000 Vac and 1500 Volt peak.

Certification: FCC Part 68 approved.

POWER REQUIREMENTS

4.75 to 5.25 Vdc, 0.25 W maximum, supplied by processor board.

ENVIRONMENTAL

Operating Temperature: -35 to 70°C (-31 to 158°F).

Storage Temperature: -40 to 85°C (-40 to 185°F).

Operating Humidity: To 95% relative, non-condensing.

DIMENSIONS

See Serial Card Specifications.

APPROVALS

See Serial Card Specifications.

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