FloBoss™ 107 Application Module

The Application Module (APP 485) provides a way to add user applications to the FloBoss 107 (FB107) by simply installing a module. The APP 485 module streamlines the installation process by including all point types and screens associated with the application, and the module is automatically recognized by FB107 firmware. In addition to the user application, the APP 485 module provides an onboard RS-485 communications port that enables communications without utilizing one of the built-in communications ports on the FB107.

APP 485 modules can house a variety of applications including a gas chromatograph interface application, a level sensor application, and more. For more information about available applications, contact your sales representative.

The APP 485 module enables the FB107 to communicate directly with field devices using the EIA-485 (RS-485) communications port included on the module. The module serves as an interface between the field devices and the FB107. S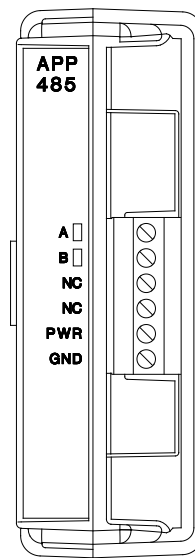upported protocols include Modbus host and slave (RTU or ASCII) and ROC. LEDs on terminals A and B provide you with visual feedback on communication activity status.

Module parameters can be modified for each application through the use of ROCLINK 800 Configuration Software and the included program screens.

The power output of the module provides power to a single device. It has a field current limit of 500 mA. External power is needed to power each field device for multiple device systems.
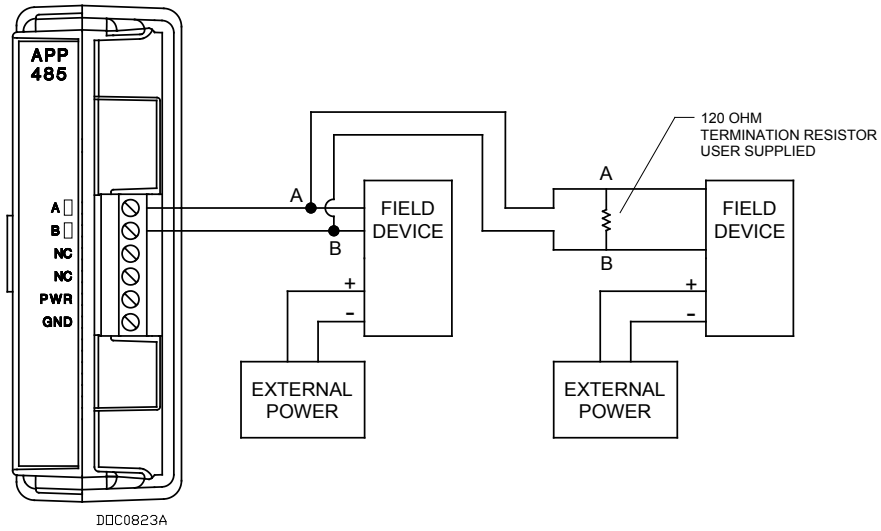
The field interface provides isolation and protects the electronics in the module. The module reduces the effect of noise on communication errors through the use of filtering.

You can install the APP 485 module in slot one through seven on the FB107 and expansion rack. The module has a removable terminal block for convenient wiring and servicing. The terminal block can accommodate size 16 to 24 American Wire Gauge (AWG).
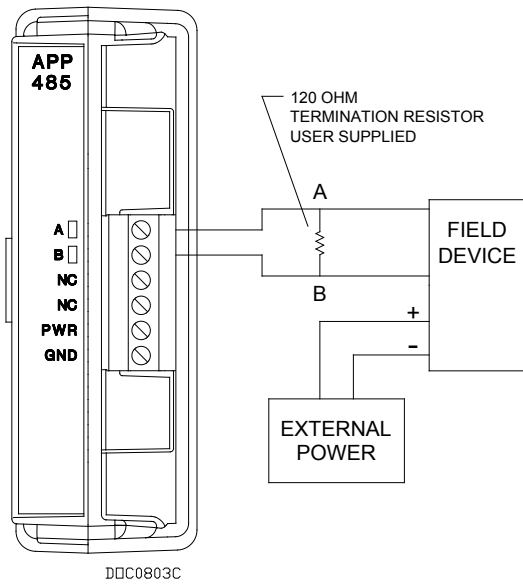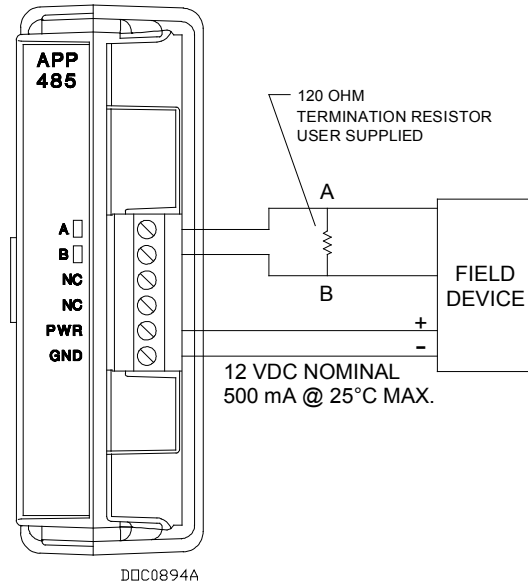

Application Module

EMERSON™
Process Management

DⒹC0823A

APP 485 Module Sample Wiring Diagram
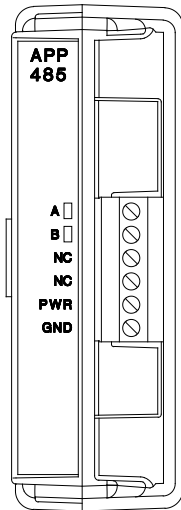*(Multiple Device Wiring, Externally Powered)*

DⒹC0803C

APP 485 Module Sample Wiring Diagram
(Single Device, Externally Powered)

DⒹC0894A

APP 485 Module Sample Wiring Diagram
(Single Device, Internally Powered)

FloBoss 107 Application Module

Field Wiring Terminals

Terminal	Label	Definition
1	A	Transmit / Receive +
2	B	Transmit / Receive −
3	NC	No Connection
4	NC	No Connection
5	PWR	+12 V Power
6	GND	Ground

DOC0886A

Communications

Type	Meets EIA-485 (RS-485) standard for differential data transmission over distances of up to 1220 m (4000 ft)
Protocols	ROC, Modbus host and slave (RTU or ASCII)
Data Rate	Selectable from 300 to 115.2 K baud
Format	Asynchronous, 7 or 8-bit (software-configurable)
Parity	None, odd, or even (software-configurable)
LEDs	A and B indicate communication activity status

Power

Consumption	150 mW non-communicating
Field Current Limit	500 mA
Over-Voltage Protection	28 V dc

Physical

Dimensions	82.55 mm H by 25.4 mm W by 127 mm L (3.25 in. H by 1.0 in. W by 5.0 in. L)
Weight	100 g (3.5 oz.)
Wiring	Size 16 to 24 AWG at the removable terminal block

Environmental

Same as the FB107 in which it is installed

Approvals

Same as the FB107 in which it is installed

Headquarters:

Emerson Process Management
Remote Automation Solutions
6005 Rogerdale Road
Houston, TX 77072 U.S.A.
T +1 281 879 2699 | F +1 281 988 4445
www.EmersonProcess.com/Remote

Europe:

Emerson Process Management
Remote Automation Solutions
Unit 8, Waterfront Business Park
Dudley Road, Brierly Hill
Dudley UK DY5 1LX
T +44 1384 487200 | F +44 1384 487258
www.EmersonProcess.com/Remote

North American/Latin America:

Emerson Process Management
Remote Automation Solutions
6005 Rogerdale Road
Houston TX USA 77072
T +1 281 879 2699 | F +1 281 988 4445
www.EmersonProcess.com/Remote

Middle East/Africa:

Emerson Process Management
Remote Automation Solutions
Emerson FZE
P.O. Box 17033
Jebel Ali Free Zone – South 2
Dubai U.A.E.
T +971 4 8118100 | F +971 4 8865465
www.EmersonProcess.com/Remote

Asia-Pacific:

Emerson Process Management
Remote Automation Solutions
1 Pandan Crescent
Singapore 128461
T +65 6777 8211 | F +65 6777 0947
www.EmersonProcess.com/Remote

Remote Automation Solutions

EMERSON
Process Management