

ROC800-Series Application Module

The Application Module (APP 485) provides a solution to add user applications to the ROC800-Series (ROC800) 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 ROC800 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 ROC800.

APP 485 modules can house a variety of applications including Modbus express and more. For more information about available applications, contact your sales representative.

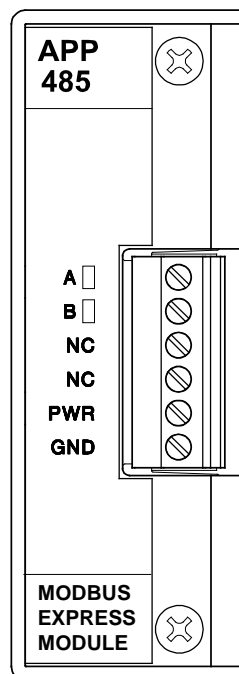
The APP 485 module enables the ROC800 to communicate directly with field devices using the EIA-485 (RS-485) communications port included on the module. The module serves as an interface between the field devices and the ROC800. Supported protocols include Modbus host and slave (RTU or ASCII) and ROC. 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.

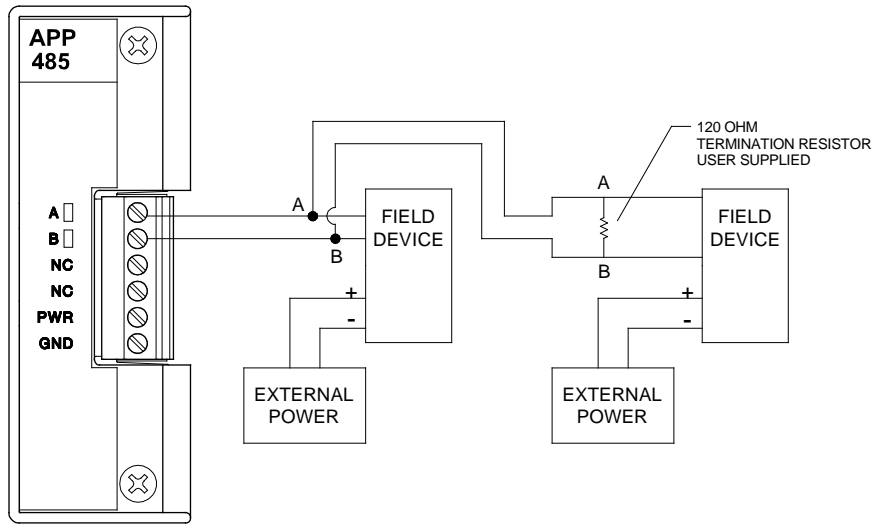
The power output of the module provides power to a single device. It has a field current limit of 500 mA. External power is needed to power each field device for multiple device systems.

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.

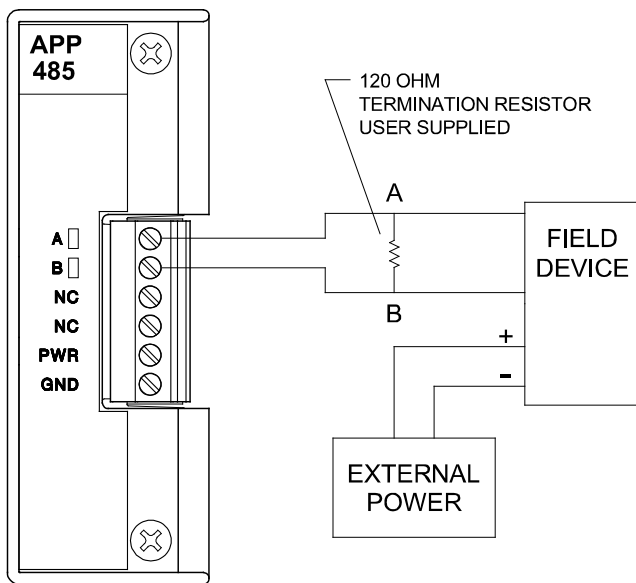
While you can install multiple APP 485 modules with different applications in the ROC800, the ROC800 supports only one of any particular application. For example, you cannot install two Modbus Express modules in the same ROC800, but you can install one Modbus Express module, one digital level sensor module, and so on. 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).



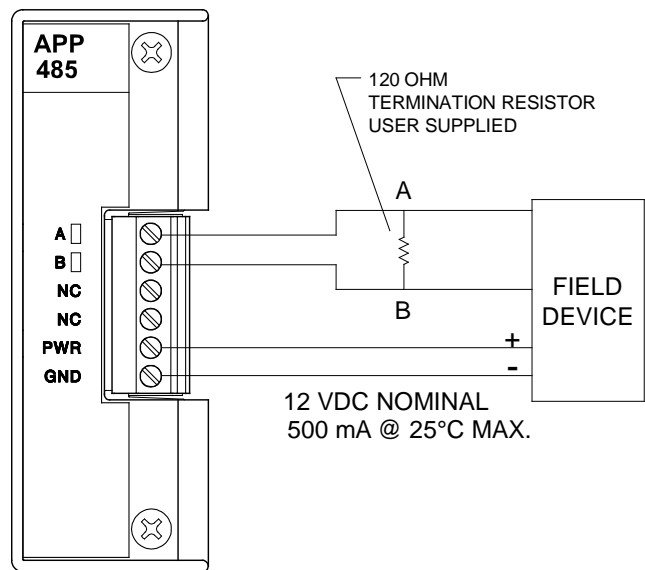
Application Module (shown with Modbus Express application)



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



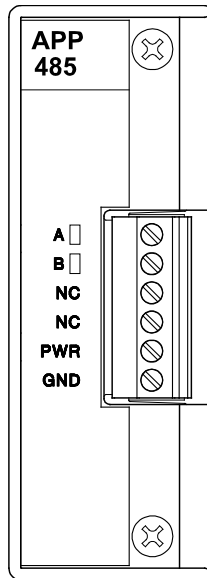
APP 485 Module Sample Wiring Diagram
(Single Device, Externally Powered)



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

ROC800 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 |

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 | 500mA |
| Over-Voltage Protection | 28 V dc |

Physical

| | |
|------------|---|
| Dimensions | 26 mm W by 75 mm H by 133 mm D (1.03 in. W by 2.96 in. H by 5.24 in. D) |
| Weight | 80 grams (2.82 oz.) |
| Wiring | 16 to 24 AWG at the removable terminal block. |

Environmental

Same as the ROC800 in which it is installed

Approvals

Same as the ROC800 in which it is installed

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