The programmable I/O Module facilitates communication capabilities of Square D® by Schneider Electric Masterpact™ and PowerPact™ circuit breakers to help improve uptime and optimize your facility’s energy and asset usage.

Using a single device, the I/O Module, improves upon traditional Cradle Communication Module (CCM) functions by providing an additional range of solutions for breaker communication, control, and monitoring.

**Flexibility and customization**

- 9-position switch for both embedded and customizable applications provides flexibility to monitor circuit breaker cradle position, control opening/closing of circuit breaker, or other user-customized functions
- Module communicates with the Micrologic™ trip unit to provide monitoring, control, alarming, and metering data
- Digital inputs & outputs provide system status information
  - 6 digital inputs are self-powered for either NO and NC dry contact or pulse counter
  - 3 digital outputs are bistable relays (5 A maximum)
  - 1 analog input for Pt100 temperature sensor

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**I/O Module**

Facilitates breaker status and metering communication in a single device.

Make the most of your energy™
General characteristics

Environmental characteristics
- Conforming to standards: UL 508, UL 60950, IED 60950, 60947-6-2
- Certification: cULus, GOST, FCC, CE
- Ambient temperature: -20 to +70 °C (-4 to +158 °F)
- Relative humidity: 5 – 85%
- Level of pollution: Level 3
- Flame resistance: ULV0

Mechanical characteristics
- Shock resistance: 1000 m/s²
- Resistance to sinusoidal vibrations: -5 Hz < f < 8.4 Hz

Electrical characteristics
- Resistance to electromagnetic discharge: Conforming to IEC/EN 61000-4-3
- Immunity to radiated fields: 10 V/m
- Immunity to surges: Conforming to IEC/EN 61000-4-5
- Consumption: 165 mA

Physical characteristics
- Dimensions: 71.7 x 116 x 70.6 mm (2.83 x 4.56 x 2.78 in.)
- Mounting: DIN rail
- Weight: 229.5 g (0.51 lb)

Degree of protection of the installed I/O application module
- On the front panel (wall-mounted enclosure): IP4x
- I/O parts: IP3x
- Connectors: IP2x

Connections
- Screw type terminal blocks, RJ45 (ULP)

Digital inputs
- Digital input type: Self-powered digital input with current limitations as per IEC 61131-2 type 2 standards (7 mA)
- Input limit values at state 1 (close): 19.8 – 25.2 V DC, 6.1 – 8.8 mA
- Input limit values at state 0 (open): 0 – 19.8 V DC, 0 mA
- Maximum cable length: 10 m (33 ft)

Digital outputs
- Digital output type: Bistable relay
- Rated load: 5 A at 250 V AC
- Rated carry current: 5 A
- Maximum switching voltage: 380 V AC, 125 V DC
- Maximum switch current: 5 A
- Maximum switching power: 1250 VA, 150 W
- Minimum permissible load: 10 mA at 5 V DC
- Contact resistance: 30 mΩ
- Digital output relay protection by an external fuse: External fuse of 5 A or less
- Maximum cable length: 10 m (33 ft)

Analog inputs
- The I/O application module analog input can be connected to a Pt100 temperature sensor
- Range: -30 to 200 °C (-22 to 392 °F)
- Accuracy:
  - ±2 °C from -30 to 20 °C
  - ±1 °C from 20 to 140 °C
  - ±2 °C from 140 to 200 °C
- Refresh interval: 5 s

To learn more
Call your Schneider Electric representative at 888-778-2733
To learn more about the IFE Ethernet Interface and FDM128 Monitor, visit www.schneider-electric.com/us

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