

Isolated SCMD Digital I/O Modules

Dataforth offers a broad line of digital input and output modules and accessories providing safe, reliable interfacing to industrial measurement and control applications. When installed near individual field loads, our SCMD series I/O modules create a rugged protective isolation barrier, effective to 4kV, between the field and computer system. Use of these modules can also reduce field wiring costs while establishing an economical, manageable approach for system expansion and repair.

The SCMD Series

SCMD miniature digital I/O modules are solid-state devices which send “ON” and “OFF” electrical signals to and from a computer. The input modules, depending on the type selected, convert AC or DC voltages to DC logic signals and send them to the computer system. Output modules work in the opposite direction, switching either AC or DC circuits on or off in response to logic-level voltage commands from the computer. SCMD modules are available in “miniature” versions of four basic types: AC input, DC input, AC output, and DC output.

- **SCMD-MIAC and -MIDC** miniature input modules are used for sensing “ON” and “OFF” AC or DC voltage levels in the ranges 10-60VAC, 90-140VAC, and 180-280VAC and 3.3-32VDC and 10-60VDC. Models with low noise, fast switching, and other special features are also available.
- **SCMD-MOAC and -MODC** are miniature output modules accepting 5VDC or 24VDC inputs and providing several different output ranges, including 12/24 to 140/280VAC and 0/3/5 to 50/60/200VDC. Fast switching, and other special options are also available.
- **SCMD-MORO and -MORC** are miniature relay output modules used for switching AC and DC loads up to 125Vrms or 100VDC at maximum 30WDC or 62.5VA.

FEATURES

- 4000Vrms Optical Isolation
- Industry-standard Packaging
- Input Modules Incorporate Input Filtering for Transient-Free Switching
- Complete Selection of Backpanels and Accessories
- Optional Low-noise, Fast-switching Models
- UL Listed, CSA Certified, CE Compliant
- RoHS III Directive (EU) 2015/863

APPLICATIONS

Input Modules Interface to:

- Proximity Switches
- Limit Switches
- Photoelectric Switches
- TTL Devices
- Pushbuttons

Output Modules for Switching AC and DC Loads:

- Relays
- Solenoids
- Motor Starters
- Indicator Lamps

SCMD Selection Guide

DIGITAL INPUT MODULES, MINIATURE

MODEL	INPUT RANGE	SUPPLY VOLTAGE
SCMD-MIAC5	90 to 140VAC/DC	5V
SCMD-MIAC5A	180 to 280VAC/DC	5V
SCMD-MIAC5E	10 to 60VAC/DC	5V
SCMD-MIAC24	90 to 140VAC/DC	24V
SCMD-MIAC24A	180 to 280VAC/DC	24V
SCMD-MIDC5	3.3 to 32VDC	5V
SCMD-MIDC5F	3.3 to 32VDC	5V
SCMD-MIDC5N	10 to 60VDC	5V
SCMD-MIDC24	3.3 to 32VDC	24V

DIGITAL OUTPUT & RELAY OUTPUT MODULES, MINIATURE

MODEL	OUTPUT RANGE	SUPPLY VOLTAGE
SCMD-MOAC5	12 to 140VAC	5V
SCMD-MOAC5A	24 to 280VAC	5V
SCMD-MOAC5B	24 to 280VAC	5V
SCMD-MOAC24	12 to 140VAC	24V
SCMD-MOAC24A	24 to 280VAC	24V
SCMD-MODC5	3.0 to 60VDC	5V
SCMD-MODC5A	5.0 to 200VDC	5V
SCMD-MODC5ML	1.0 to 50VDC	5V
SCMD-MODC24	3.0 to 60VDC	24V
SCMD-MORO5	100/125 VDC/Vrms	5V
SCMD-MORC5	100/125 VDC/Vrms	5V
SCMD-MORO24	100/125 VDC/Vrms	24V
SCMD-MORC24	100/125 VDC/Vrms	24V

DIGITAL I/O MODULE ACCESSORIES

MODEL	DESCRIPTION
SCMD-PB4/D	4-ch Backpanel, Full Size & Miniature / DIN Mount
SCMD-PB4R/D	4-ch Backpanel, Full Size & Miniature, Output Only / DIN Mount
SCMD-PB8SM/D	8-ch Backpanel, Miniature / DIN Mount
SCMD-PB16SM/D	16-ch Backpanel, Miniature / DIN Mount
SCMD-PB16TSM/D	16-ch Backpanel, Miniature, Screw Term I/O / DIN Mount
SCMD-PB24SM/D	24-ch Backpanel, Miniature / DIN Mount
SCMD-JM8	Board Jumper, Miniature

Digital Input Modules - Model No. Suffixes Identifying Optional Features

Suffix	Feature
A	High-voltage Versions (280VAC for AC Modules)
E	Low-voltage 10VAC-input for AC Modules
F	Fast-switching Version of DC Modules
N	Enhanced Noise-immunity Version of DC Modules

Digital Output Modules - Model No. Suffixes Identifying Optional Features

Suffix	Feature
A	High-voltage Versions (280VAC for AC Modules, 200VDC for DC Modules)
B	High-voltage Versions (280VAC for AC Modules) with Low-leakage Output Current
ML	FET-output Version of DC Module, 5.0A, 50VDC