



SPECTRUM
C O N T R O L S

Spectrum Operator Interface

SOI-120 / DTAM™ MICRO

- Faster implementation and increased productivity with fill-in-the-blanks, easy-to-use programming software
- Increased control of process elements with 8 programmable function keys that can perform “hot screen” call-up and bit manipulation
- Less programming and reduced operator entry errors with auto-scaling and programmable operator entry limits (minimum and maximum values)
- Direct access to any register location within the PLC with P/AD feature
- Quick operator response and reduced downtime with alarm generation
- Controlled access with security screens
- Rugged, high-quality products that are NEMA 4, 12, 13, IP65 rated, as well as CSA, UL/cUL Class 1 Div 2 and CE certified



The Spectrum Operator Interface provides powerful functionality in a small, low-cost package. The SOI-120 and DTAM have a 2-line by 20-character display, is easy to set up and is easy for the operator to use.

The SOI-120 and DTAM also provide 8 programmable function keys. The function keys allow control of process elements (through bit manipulation), on-demand “hot screen” call-up or a combination of both.

The SOI-120 and DTAM even provide menu screens that can be linked together to provide a complete set of instructions for the operator to follow based on the application. Screen types include Programmable Menus, Data Display, Data Entry, Security and Interactive Alarms.

The SOI-120 and DTAM also support the powerful P/AD (Point/Access Display) feature. The P/AD feature allows access to the entire data register table within a PLC. An operator or maintenance person may access any register location directly by typing in the PLC address, powerful for system start-up/debug and troubleshooting.

The SOI-120 and DTAM connect directly to the programmable controller or the PLC communications module and requires little or no programming within the PLC. The cost-competitive design makes it ideal for small stand-alone applications or for multiple operator stations in a large, distributed control system.

SOI-120 / DTAM™ MICRO

DISPLAY SPECIFICATIONS

Display Technology LCD (twisted nematic)
with yellow LED Backlight
Configuration 2 Line x 20 Characters
Backlight Settings 0, 33, 66 & 100% (via keypad)
Contrast Ratio 10:1
Contrast Settings Four (via keypad)
Max. Viewing Angle +/- 30° to +/- 60° (horizontal)
-20° to +30° (vertical)
Display (h x w) 1.0 x 3.0 in. (15 x 76 mm)
Character (h x w) 0.19 x 0.12 in. (4.75 x 2.95 mm)

KEYPAD SPECIFICATIONS

Keypad Type Membrane
Tactile Feedback Embossed Dome
Operation Force 16 oz (453 g)
Operational Life 1 Million Cycles

ELECTRICAL SPECIFICATIONS

User Memory Type (size) FLASH (244 Screens)
Run LED (green) ... Indicates digital logic circuitry is
functioning properly
Comm. Port Selectable RS-422/485 or RS-232
Power Requirements 18-30 VDC 200 mA
Power Supply Fusing Internal

PHYSICAL SPECIFICATIONS

Dimensions (h x w x d) 3.9 x 5.4 x 1.8 in.
(99.1 x 137.2 x 45.7 mm)
Front Panel Size (h x w) 5.4 x 6.9 in.
(137.2 x 175.3 mm)
Weight 1.0 lb (0.45 kg) max.

ENVIRONMENTAL SPECIFICATIONS

Temperature Rating 0 to 55° C (32 to 131° F)
Storage Rating ... -20 to +70° C (-4 to +158° F)
Humidity Rating .. 5-95% RH (non-condensing)
Shock 30G operating 50G non-operating
Vibration.. 2.5G operating, 5.0G non-operating
(5-2000 Hz)
Ratings NEMA Type 4, 12, 13, IP65
Certifications CSA; UL/cUL
Class 1, Div 2, Groups A B C D;
CE per European Directive 89/336/EEC
Electromagnetic Compatibility

AVAILABLE PROTOCOLS

Allen-Bradley DF-1 / DH-485
Square-D SY/MAX® Models 300-700
Modicon Modbus® & Open Modbus
Siemens Simatic® S5
IDEC FA Series
Omron Hostlink
Texas Instruments 405

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Modbus is a registered trademark of Modicon, Inc. Simatic is a
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