

Series S1501 Selectronic® Micro-Controller/Annunciator



Features

- For engine and electric motor driven equipment applications
- Easy operation/adjustments, six-button keypad
- Automatic engine/electric motor control
- Automatic loading
- Alarm/Shutdown for 32 or 64 N.O. or N.C. sensors
- Field adjustable sensor nomenclature
- Selectable sensor lockouts Class A, B, C or P
- Built-in tachometer/overspeed function
- RS232 or RS485 Modbus RTU communications
- Two start/run lockout timers and elapsed time meter
- Pre-lube and post-lube timers
- Seven control relay outputs
- CSA Certified or NRTL approved for use in Class I, Div. 1 Grps. C & D hazardous locations

The S1501 instrument is a microprocessor based alarm, shutdown and control system with tachometer/hourmeter function. It annunciates in alphanumeric characters the protective device that has signaled an alarm or caused equipment shutdown. Information is called up and adjustments are made on a six-button keypad on the face of the unit. Configurations such as: Alarm or Shutdown Nomenclature, Preset Timers, and Tachometer Calibration can be made in the field. Murphy's S1501 system has seven SPDT relays. On the standard model, the relays are assigned to the following functions: Lube, Crank, Ignition/Motor, Fuel Valve/Cooler, Load, Alarm, Shutdown.

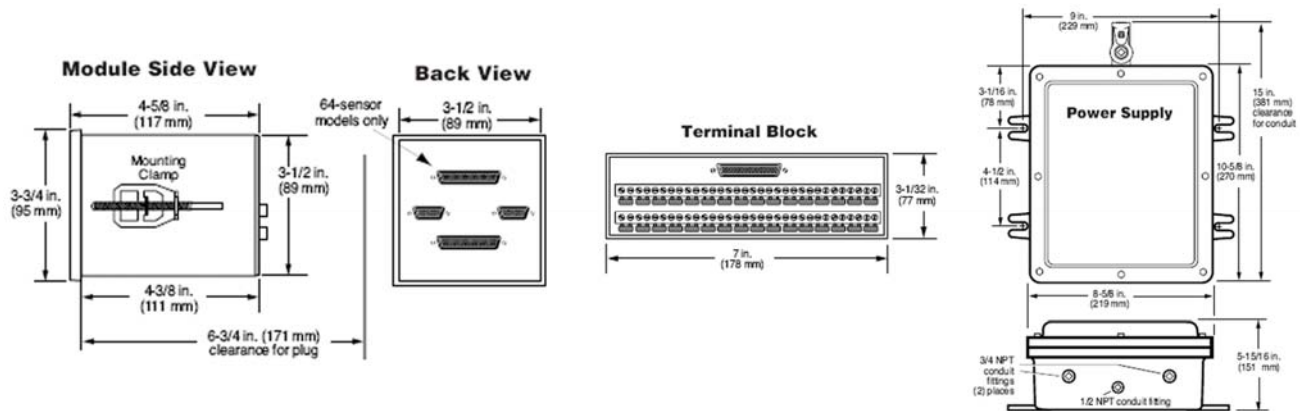
The complete S1501 system consists of a head, sensor input terminal strip (two needed for 64 sensor models), 36 inch (914 mm) flat ribbon cable(s) for connecting the terminal block to the head, and a Class I, Div. 1, explosion-proof power supply.

The S1501 system is powered from 120 VAC or 12 or 24 VDC. The head is rated intrinsically safe and includes a communication port, jumper selectable for either RS232 or RS485, operating as a Modbus RTU slave. This port allows for remote control functions such as Start/Stop, Load/Unload, etc., and for read access to S1501 holding registers.

Applications

The S1501 system can be configured to monitor applications such as: Air and Natural Gas Compressors, Natural Gas Refueling, and other industrial operations. For a list of applications and our cataloged programs contact a Murphy sales representative. Custom programming is available at additional charge.

Product Dimensions



Specifications

Power Consumption

- 120 VAC (7.5 VA)
- 12 VDC (3.5 watts)
- 24 VDC (3.5 watts)

Sensor Inputs

32 or 64 N.O. and/or N.C. inputs such as Murphy Switchgag® instruments.

Field selectable as a Class A, B1, B2, C, P or ESD for shutdown, alarm, or control function.

NOTE: Sensor inputs 27 through 32 reserved for control functions.

Outputs

7-SPDT relay outputs, 5 A, 1/16 HP, 125/250 VAC/ 1 A, 30 VDC

NOTE: For hazardous areas an approved isolation barrier must be used between sensor switch and input terminals if the sensor output comes from any energy storing device such as a relay or transistor.

Adjustable Time Delays

- Permissive
- Prelube
- Purge
- Fuel
- Crank
- Run
- Class B1 Lockout
- Class B2 Lockout
- Process Lockout
- Idle/Cooldown
- Ignition Ground
- Postlube
- Cooler

How to Order

To order the S1501 system specify the model number for each individual component and accessory:

S1501H-32-2	Head with RS232/RS485 port for 32 sensors
S1501H-64-2	Head with RS232/RS485 port for 64 sensors
S1501CH-32-2	Head w/custom* program, RS232/RS485 port, 32 sensors
S1501CH-64-2	Head w/custom* program, RS232/RS485 port, 64 sensors
S1500TB32	Terminal Block only**
S1500CA36	Ribbon Cable Assembly**
S1501PS-120	120 VAC, 12 or 24 VDC Power Supply
S1501PS-120-E	Power Supply with 90° Conduit Elbow fitting

Accessories:

S1501PCA72	Power and Control Cable Assembly, 72 in. (1.8 m) long
S1501PS-120-LC	Power Supply less case

* Specify program number or contact Murphy for available programs listings.

** Two required for 64 sensor models.

Sensor Inputs Terminal Block

Rail mount DIN type; 32 terminals, screw type

Opto-Isolated Tach/Run Input

Magnetic pickup, 4.5 to 120 Vrms, 0-10 kHz. CD ignition, positive or negative ground, 100 to 300 VDC, 3-666 Hz. 12 to 125 VDC or 120 Vrms, 50/60 Hz may be used for run signals.

Operating Temperatures: 32 to 122°F (0 to 50°C)

Storage Temperatures: -4 to 158°F (-20 to 70°C)

Case : ABS plastic, 1/4 DIN (90 x 90 mm)

Interface Output

Factory configured for RS232; field-selectable for RS485.

Alphanumeric Display

2 lines, each line with 16 characters (32 characters total)

Power Supply Enclosure

Explosion-proof, Class I, Division 1. Intrinsically safe barrier built into the power supply, 120 VAC with 7 form "C" relay outputs for the following functions (with standard S1501):

- Lube
- Crank
- Ignition/Motor
- Fuel/Cooler
- Load
- Alarm
- Shutdown

Approximate Shipping Weights / Dimensions

S1501 complete system:

28 lb. (12.7 kg) / 20x14x12.5 in. (508x356x218mm)

S1501H-32-2; S1501H-64-2; S1501CH-32-2; S1501CH-64-2:
2 lb. (0.907 kg) / 6x6x6 in. (152x152x152mm)

S1500TB32:

2 lb. (0.907 kg) / 12x7x4 in. (305x178x102mm)

S1500CA36; S1501PCA72:

2 lb. (0.907 kg) / 6x6x6 in. (152x152x152mm)

S1501PS-120-LC:

3 lb. (1.36 kg) / 12x7x4 in. (305x178x102mm)

S1501PS-120 and S1501PS-120-E:

22 lb. (9.98 kg) / 17x10x9.75 in. (431x254x248mm)

FW MURPHY

P.O. Box 470248
Tulsa, Oklahoma 74147 USA
+1 918 317 4100 Fax: +1 918 317 4266
E-mail: sales@fwmurphy.com

INDUSTRIAL PANEL DIVISION

Fax: +1 918 317 4124
E-mail: ipdsales@fwmurphy.com

MURPHY POWER IGNITION

Web site: www.murphy-pi.com

CONTROL SYSTEMS & SERVICES DIVISION

P.O. Box 1819
Rosenberg, Texas 77471 USA
Phone: +1 281 633 4500 Fax: +1 281 633 4588
E-mail: sales@fwmurphy.com

FRANK W. MURPHY, LTD

Church Rd Laverstock
Salisbury SP1 1QZ UK
Phone: +44 172 241 0055 Fax: +44 172 241 0088
E-mail: sales@fwmurphy.co.uk
Web site: www.fwmurphy.co.uk

COMPUTRONIC CONTROLS, LTD

41 - 43 Railway Terrace
Nechells, Birmingham B7 5NG UK
Phone: +44 121 327 8500 Fax: +44 121 327 8501
E-mail: sales@computroniccontrols.com
Web site: www.computroniccontrols.com

www.fwmurphy.com

FW MURPHY INSTRUMENTS (HANGZHOU) CO. LTD

77 23rd Street
Hangzhou Economic & Technological Development Area
Hangzhou, Zhejiang 310018 China
Phone: +86 571 8788 6060 Fax: +86 571 8684 8878

FW MURPHY INTERNATIONAL TRADING (SHANGHAI) CO., LTD.

Suite 1784, Tower B, City Center of Shanghai; 100 Zunyi Road
Shanghai, 200051 China
Phone: +86 21 6237 2082 Fax: +86 21 6237 2083
Web site: mhong@fwmurphy.com



Printed in U.S.A.

Warranty - A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to www.fwmurphy.com/support/warranty.htm