

ST-71,16 Channel Modbus® Master/Slave Display and Alarm Controller



ST-71PM Rack/Panel Mount 71-04

The ST-71 16 Channel Modbus® Master/Slave Display and Alarm Controller provides simultaneous display and alarm functions for up to 16 monitored variables. Easy to configure and user friendly, the ST-71 can function as a critical alarm controller for toxic or combustible gases, vibration, tank levels and other process values.



ST-71N4 NEMA 4X Wall Mount 71-01

CSA certified for Division 2 potentially hazardous areas (Division 1 model = ST-71XP)

FEATURES

- Accepts up to 16 inputs from many sensor types and signal ranges. Modbus® master capability allows input data to be retrieved via RS-485
- Eight channel display mode and option boards allow economical configuration of systems requiring only 8 channels or less
- Dual Modbus® RS-485 serial ports for simultaneous master / slave operation
- Three independent alarm levels per channel. "Relay Acknowledge" feature allows silencing of external audible devices during existing alarm conditions
- Graphic LCD displays monitored data as trends, bar graphs and engineering units. Alarm LED's flash when new and become steady after acknowledged

- Standard SPDT common alarm relays for HORN, HIGH, WARN and FAULT
- Options such as Bridge Sensor Inputs, 4-20mA inputs, 4-20mA outputs, discrete alarm relays are supported via an I2C expansion bus
- Cal Mode offers push-button zero/span calibration or direct sensor interface applications
- Authorization Mode allows locking of critical config -variables
- Magnetic keypad standard for non-intrusive operation in potentially hazardous locations
- Enclosures include wall mount NEMA 4X Non-Metallic - 316 SS, NEMA 7 and Rack/Panel Mount

SPECIFICATIONS

ANALOG INPUTS (OPTIONAL)

12 bit 4-20mA into 100 ohms input impedance; includes +power supply terminals for each channel for routing power to two or three wire transmitters

COMMON ALARM RELAYS (STANDARD)

5 amp 30VDC or 250VAC resistive Form C

ANALOG OUTPUTS (OPTIONAL)

10 bit 4-20mA output. Max load 800 ohms with nominal 24VDC power supply

DISCRETE ALARM RELAYS (OPTIONAL)

Four 5 amp 30VDC or 250VAC resistive Form C

SERIAL PORT (STANDARD)

Modbus Master and Slave RS-485 ports equipped with Tx / Rx LED's

DISPLAY

 $128 \ x \ 240$ pixel graphic LCD with backlight displays bar graphs, trends and engineering units. 52 discrete LED's indicate alarm status for three alarms per 16 channels and common relays

AMBIENT TEMPERATURE RANGE

-25 - 60 degrees C

POWER SUPPLY

10 - 30VDC 12 Watts max required by ST-71

10-0172 option = 150 Watt

APPROVALS

CSA C22.2 No 1010.1 and C22.2 No.152 for combustibles and ISA S82.02

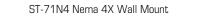
UL 1604 / C22.2 No 213 (NEMA 4X = Division 2 Groups A,B,C,D,) EN55011 and EN61000 (CE Mark)

8.50

Model ST-71XP 71-02 = NEMA 7 Division 1 Group B,C,D

MODELS

IVIODELS		
71-01	ST-71N4 NEMA 4X wall mount	
71-02	ST-71XP NEMA 7 wall mount explosion-proof	
71-04	ST-71PM panel mount rack (includes bezel/rack hardware)	
71-06	ST-71SS NEMA 4X 316 wall mount stainless steel	
ΟΡΤΙΟ	NS/ACCESSORIES	
10-0144	Auxiliary relay board adds 5 amp Form C common relays for Alarm 1, Alarm 2 and Horn	
10-0158	8 channel 4-20mA analog input board	
10-0167	8 channel 4-20mA analog output board	
10-0195	8 channel discrete 5 amp Form C relay board configurable for Alarm 1, Alarm 2 or FAULT	
10-0170	8 channel resistive/RTD/mA input board	
10-0191	8 channel catalytic bead sensor input board	
10-0192	Dual catalytic bead modules for 10-0191	
10-0172	24VDC 150 Watt power supply	
10-0229	Printer interface board (serial / parallel)	
10-0178	Expansion NEMA 4X enclosure for 8 options	
10-0208	Full 19" rack (Supports one or two 71-03's)	
ST-71-HMI	ST-71 HMI software	



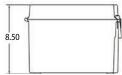
71-01

ST-71XP Nema 7 Explosion Proof

71-02

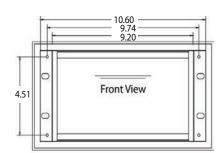
ST-71PM Rack/Panel Mount (19" Rack Spreader Plates Not Shown) 71-04

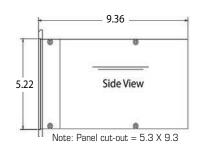




BOTTOM VIEW Jι 3/4" CONDUIT ENTR (TYP 4 PLACES) 9 1/16 0 0 2" CONDUIT ENTRY MOUNTING FOOT 16.00 17 3/4 Φ 0 ¢ FRONT VIEW 22.3/8 Φ Ф ¢ ALL DIMENSIONS IN INCHES

SYST





Represented by: **C A Briggs Company** 622 Mary Street; Suite 101 Warminster, PA 18974 Phone: 267-673-8117 - 800-352-6265 Fax: 267-673-8118 <u>Sales@cabriggs.com</u> - www.cabriggs.com

HRC 8621 Highway 6, Hitchcock, TX 77563 Tel: (409) 986-9800 ● Fax: (409) 986-9880 www.rcsystemsco.com