

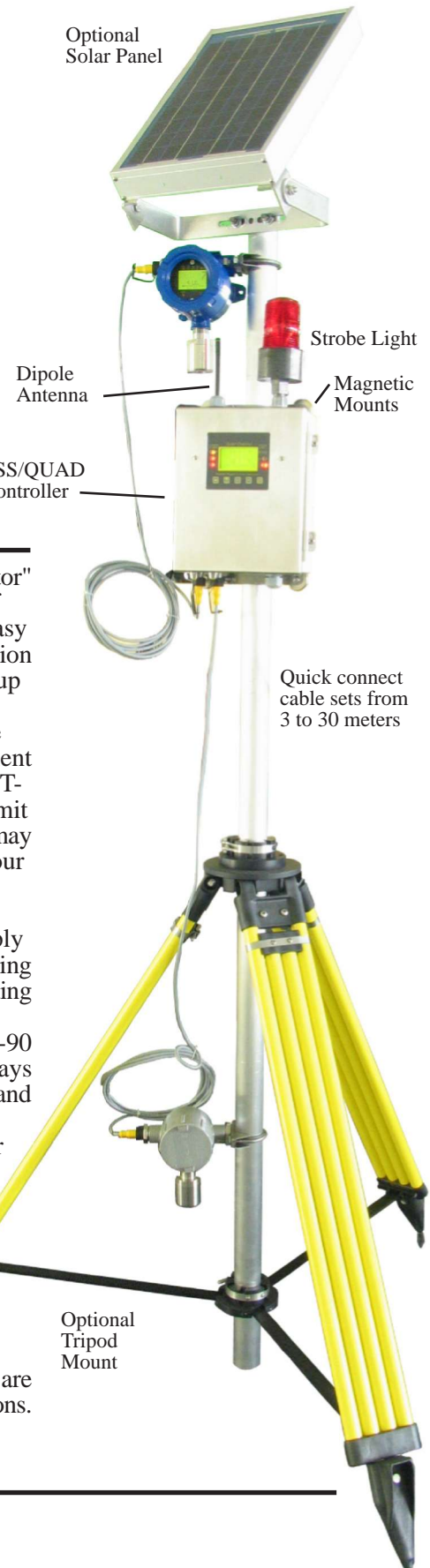
FEATURES:

- Accepts four inputs from monitors and/or bridge sensors
- Division 2 rated "Quick Connect" ports and cable sets for all connections including sensors and monitors. 10', 25', 50', and 100' male/female cable sets available
- Flexible power supply directly accepts 10-30VDC, 100-240VAC, battery and solar power sources
- Flexible mounting options include pole mount, wall mount and tripod or magnetic mount for portable applications
- 900MHZ or 2.4GHZ wireless option transmits data to our 16 or 64 channel controller transceivers
- 316 SS, non metallic and epoxy painted enclosures available
- Controller is NRTL certified for Class I, Div. 2, Groups A,B,C,D
- Three independent alarm levels per channel. *Relay Acknowledge* feature allows silencing of external audible devices
- Graphic LCD readout displays monitored data as bar graphs, trends and engineering units
- Two standard SPDT common alarm relays are configurable for HORN, HIGH, WARN or FAULT alarm conditions
- Options such as modbus, 4-20mA outputs, discrete alarm relays and others are supported
- *Cal Mode* offers pushbutton calibration for direct sensor interface applications. *Authorization Mode* allows locking of critical configuration variables
- Touch and magnetic keypad for non-intrusive operation in potentially hazardous locations

ST-90/QUAD Site Controller



Optional Solar Panel



ST-90SS/QUAD Site Controller

The R. C. Systems Inc. "Rig Protector" package offers up to four points of critical monitoring in a compact easy to install package. The wireless option transmits monitored modbus data up to 10 miles with a high gain mast mounted antenna or 3000' with the standard dipole antenna. FHSS Client / Server addressing allows many ST-90/QUAD site controllers to transmit in the same area. The wireless port may also be used to receive data from our wireless sensor transmitters.

Flexible mounting and power supply options make it suitable for monitoring perimeters, mobile work sites including HAZMAT facilities, rigs, disaster responses, and many more. The ST-90 QUAD site controller activates relays for strobes, horns, fans, shut down and other alarm events. Our ST-71 & ST-72 Controllers provide receiver functions for up to 16 Rig Protectors.

Inputs include 4-20mA from toxic, oxygen, combustible monitors but raw sensor signals from catalytic, infrared and PID are also accepted. Critical components are suitable for Division 2 area installations.

Optional Tripod Mount

SPECIFICATIONS

INPUTS

Available inputs include 4-20mA with precision 100 ohm terminating resistor (0-2 Volt inputs may be accepted by removing the socketed terminating resistor) and bridge sensor inputs with adjustable Sensor Excitation and Balance settings

COMMON ALARM RELAYS (STANDARD)

Two, 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)

Six 5 amp 30VDC or 250VAC resistive Form C

SERIAL PORT (OPTIONAL)

Modbus Slave RS-485 port equipped with Tx / Rx LED's
900MHZ FHSS wireless modbus slave with RP-SMA connector
2.4GHZ FHSS wireless modbus slave with RP-SMA connector

DISPLAY

128 x 64 pixel graphic LCD with backlight displays bar graphs, and engineering units.
6 discrete LED's indicate alarm status, CAL MODE, keypad

AMBIENT TEMPERATURE RANGE

-25 to +60 degrees C.

POWER SUPPLY

100-240 VAC or 10-30VDC are standard primary power supplies

HOUSING OPTIONS

NEMA 4X Non-Metallic / wallmount approved for Div 2
NEMA 4X Stainless Steel / wallmount approved for Div 2
NEMA 4 Painted Carbon Steel / wallmount approved for Div 2

ST-90/QUAD APPROVALS

CSA C22.2 No 1010.1 & 152 for combustibles & ISA S82.02;
UL 1604 / C22.2 No 213
Division 2 Groups A,B,C,D Hazardous Areas
EN55011 & EN61000 (CE Mark).

ORDERING INFORMATION

ST-90SS/QUAD = NEMA 4X SS Enclosure (Div 2)
ST-90PCS/QUAD = NEMA 4 PCS Enclosure (Div 2)
ST-90PY/QUAD = NEMA 4X PY Enclosure (Div 2)

Example Configuration:

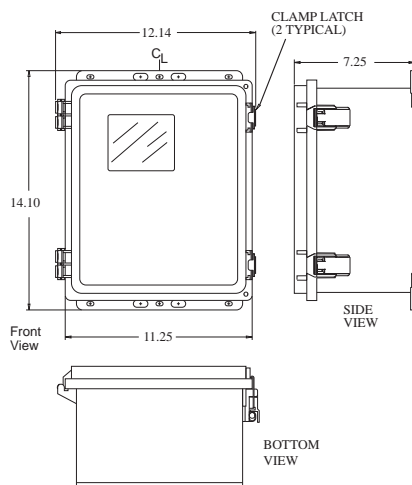
- 1, ST-90SS/QUAD Controller (options shown below)
- 1, 10-0221-4 Quad 4-20mA Input Option
- 1, 10-0222 Discrete Relay Option
- 1, 10-0284 Red Strobe Light (Div 2) Option

The above combination orders the SS four channel controller with 4-20mA inputs, the optional 10-0222 six discrete programmable relays and the 10-0284 Div 2 red strobe light option mounted on top.

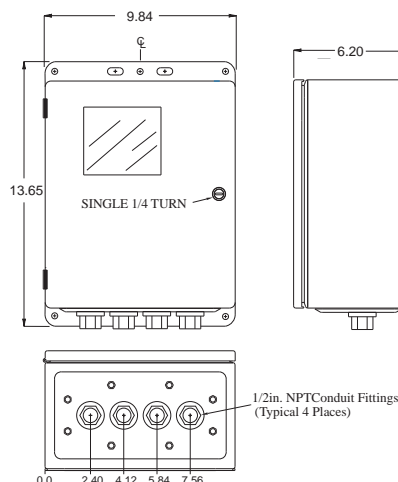
ACCESSORIES and SPARE PARTS (see manual)

- 10-0221-4 = 4 Channel 4-20mA Analog input PCB Option
- 10-0222 = Discrete relay with six 5 amp Form C relays Option
- 10-0308 = Quad 4-20mA Outputs Option
- 10-0309 = Quad Bridge Sensor Inputs Option (may accept 2 4-20's)
- 10-0227 = RS-485 / RS-232 Modbus RTU Interface Option
- 10-0328 = 900MHZ Wireless Interface with Local 2 dBi Antenna
- 10-0355 = 2.4 GHZ Wireless Interface with Local 7 dBi Antenna
- 10-0284 = Division 2 red xenon strobe light Option
- 10-0334 = 30 Watt Solar PS for Division 2; with 55AH Battery
- 10-0333 = Tripod and Column Mounting Option
- 10-0319 = Magnetic Mounting Option
- 1000-2259 = Integral Division 2 Fifty Watt 24VDC Power Supply
- 1000-2281 QUICK CONNECTOR; 3/4" NPT; DIVISION 2
- 1000-2282 QUICK CONNECTOR; PANEL; DIVISION 2
- 1000-2283 LOCKFAST CABLE GUARD; DIVISION 2
- 1000-2284 3 METER CABLE SET; DIVISION 2
- 1000-2285 8 METER CABLE SET; DIVISION 2
- 1000-2286 15 METER CABLE SET; DIVISION 2
- 1000-2287 30 METER CABLE SET; DIVISION 2

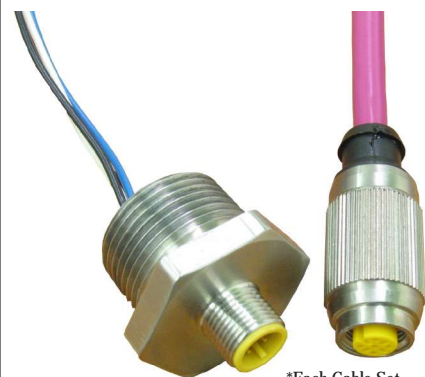
ST-90PY "Poly" Non-Metallic
NEMA 4X Wall Mount



ST-90SS "Stainless Steel" &
ST-90PCS "Painted Carbon Steel"
NEMA 4 Metallic Wall Mount



1000-2281 3/4" NPT
Quick Connector. Use for
adapting sensor side J-
Box to Cable Sets



*Cable Sets
1000-2284
1000-2285
1000-2286
1000-2287

*Each Cable Set
includes 2, 1000-2283
Lockfast Guards
(not shown)