



## FLAME MONITORING SYSTEM

**MODEL P532 SIGNAL PROCESSOR** 



- Automatic viewing head detection.
- Ability to monitor UV and IR Separately.
- Monitor three viewing heads simultaneously.
- Scrolling three color alphanumeric dot matrix displays.
- Two sets of configuration data: Primary or Alternate.
- Automatic setup functionality.
- Lockable front panel access.
- Viewing head error detection with lock out capabilities.
- P522 emulation mode selectable by jumper installation.
- Safety lockout mode when changing viewing heads while in operation.
- Compatible with RS422 and Modbus protocols.
- Field upgradeable with firmware capabilities.

## **P532 SPECIFICATIONS**

**Electrical** 

**Main Power** 

**AC** version

Main Power

85 - 264 VAC, 47-63 Hz

Battery

24 VDC (voltage above 24 volt will be the power source)

DC version

Main Power

24 VDC

Battery

24 VDC (power source is taken from the higher voltage)

Power (DC unit tested at 100 ms sampling time)

13.2 Watts max. Average (including 3 viewing heads)16.2 Watts max. Peak (including 3 Viewing heads in normal operation)

**Environmental** 

**Ambient Temperature** 

-40° F (-40° C) to 140° F (60° C) **FM** or 32° F (0° C) to 125° F (52° C) **CSA** 

Humidity

non-condensing.

Maximum 80% for temperatures below 88° F (31° C) Decreasing to 50% maximum at 104° F (40° C) and above.

**Vibration** 

+1 g at 10 to 150 Hz

**Outputs** 

Flame Relay

3 channels of 2 Form C Contacts (DPDT)

Self-Check Relay

1 channel of 1 Form C Contact (SPDT)

**Contact Rating** 

5A at 32 VDC and at 250 VAC

**Alarm Relays** 

3 channels of 1 Form A Contact (SPST-N.O.)

**Contact Rating** 

2 A at maximum 250 VDC or 230 VAC

**Analog Flame Signal** 

0 - 20 mA or 4 - 20 mA

 $1000\Omega$  maximum resistance

**Power To View heads** 

100 mA (maximum average)

24 VDC (rated)

Current limited to 200 mA

24v output

24-volt output 50 mA

For Instrumentation use only

Provided for use with Isolated Select inputs

Inputs

**Isolated Select** 

7.5 - 30 VDC

Input Resistance  $3900\Omega$ 

**Aux Mode** 

Connect to ground only

(WARNING: do not apply Power)

Sources 1 mA at 5 VDC

Viewing Head Signal (for 55x and 70x viewing heads)

26-Volt P-P Maximum

1 MA

Serial Communications

RS-422 / 4 wire (two twisted pair)

**Baud** 38400, 19200, 9600 or 4800

Parity None, Even or Odd Protocol Modbus (RTU)

**Flame** 

Maximum flame detector response time

5 second

Minimum flame detector self-checking rate

1 second

Maximum flame failure "lock-out" time

2 to 4 seconds (adjustable)

Maximum flame failure response time

2 to 4 seconds (adjustable)

Signal for presence of flame

Flame on set point (adjustable)

Signal for absence of flame Flame off set point (adjustable)

Compatibility

Viewing Head #3

S702, S706, S802, S806 (including PH and HF versions)

Viewing Head #1 or #2

S550x, S552x, S556x (including PF versions)

**Fuses** 

No user serviceable components inside.

Self-resetting fuses are provided internally on the following connections:

+24 PWR DC input voltage supply (DC units only)

+24 BATT Battery input voltage supply

These require cooling off period (with no load) to reset.

Cable

Connection from the Signal processor to the viewing heads shall use approved cable:

Cable can be Instrument Tray cable with CIC C22.2 No. 239 certification such as IRIS C-330, or must be run inside of Conduit (with properly sealed ends).

For additional Information, please contact:

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