

IRIS



FLAME MONITORING SYSTEM

MODEL P531 SIGNAL PROCESSOR AND P532UI USER INTERFACE



- 👁️ Monitor 3 viewing heads simultaneously
- 👁️ Ability to monitor UV and IR separately
- 👁️ Automatic viewing head detection
- 👁️ Two sets of configuration data: Primary or Alternate
- 👁️ Automatic set up functionality
- 👁️ Viewing head error detection with lockout capabilities
- 👁️ Selectable P522 emulation mode available
- 👁️ Compatible with RS422 and Modbus protocols
- 👁️ Field upgradeable with firmware capabilities
- 👁️ Program with P532UI interface or optional PDA

P531 shown with optional PDA and interface cable



WORLD LEADER IN FLAME MONITORING

MODEL P531 and P532UI 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

1000Ω 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 3900Ω

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.

Maintenance

No maintenance is required.

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 more information, please contact:

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