

U2S Series

Combination Viewing Head/Signal Processor

Honeywell



Engineered for the toughest environments.

The U2S Series is an all-in-one integrated processor and viewing head flame detection solution which is uniquely suited for single or multi-burner, multi-fuel and difficult flame detection applications. The all-in-one solution eliminates the need for a separate processor which saves cost on cabinets, wiring, installation and maintenance. Along with the easy to use touch screen display, the U2S Series is a flexible and reliable flame detection solution that is tailor made for the unique demands of industrial processes.

U2S Series all-in-one integrated processor and viewing head solution.

The U2S Series can be used in a variety of common applications including industrial process boilers, co-gen boilers, cement or lime kilns, thermal oxidizers, flare stacks, and gas turbines. In addition, the U2S Series can meet challenging flame monitoring applications like black liquor recovery and sulfur recovery.



Features

- Electronic check (no mechanical shutter).
- Multiple sensor options: UV Tube, Solid State IR and Solid State UV.
- Adjustable gain settings for each sensor.
- Ten selectable flicker frequency filters (model dependent).
- Fully programmable using touch screen interface.
- Two wire Modbus RTU for external programming, compatible with FlameTools or other master device.
- File Select input/output allows for external control of two pre programmed device file settings with feedback to the burner control system.

Specifications

- Input power: 22-26 VDC, 120 mA max.
- Output relay contacts: one normally open flame relay and one normally open fault/self-check relay, 1A, 30 VDC.
- Ambient temperature: -40°F to 158°F (-40°C to 70°C).
- Analog flame signal: 0-20 mA or 4-20 mA output.
- Enclosure: IP66, 1" NPT mounting.
- Adjustable flame on/off threshold.
- Adjustable FFRT 1, 2, or 3 seconds.
- Not adversely affected by x-rays and gamma rays.

Industry Applications

- Power Generation
- Petrochemical
- Petroleum Processing
- Pulp and Paper
- Metals Finishing

Automation and Control Solutions

Commercial/Industrial Combustion Controls
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Models

Part Number	Sensor Type	Description
U2-1010S	UV Tron/IR/UVSS	Quick disconnect cable. Suitable for all fuels.
U2-1010S-PF	UV Tron/IR/UVSS	Factory installed cable. Suitable for all fuels.
U2-1012S	IR	Quick disconnect cable. Suitable for oil and coal.
U2-1012S-PF	IR	Factory installed cable. Suitable for oil and coal.
U2-1016S	UVTron	Quick disconnect cable. Suitable gaseous fuels.
U2-1016S-PF	UVTron	Factory installed cable. Suitable gaseous fuels.
U2-1018S	UVTron/IR	Quick disconnect cable. Suitable for all fuels.
U2-1018S-PF	UVTron/IR	Factory installed cable. Suitable for all fuels.
Approximate Dimensions: 6.1" Length (155 mm) x 4.6" Diameter (117 mm)		

Approvals

- FM, CSA
- EN298 (CE)
- KTL*
- INMETRO*
- PF version: Class I div 1 Gr A, B, C, D, E, F, G T6, ATEX/IECEX Ex d IIC; Ex tb IIIC
- Quick disconnect version: Class I div 2 Gr A, B, C, D T5, ATEX/IECEX Ex nA nC IIC; Ex tb IIIc
- Fit for use in SIL 3 applications

*Coming soon