Honeywell
THE POWER OF CONNECTED | Connected Industrial

U2S SERIES

Combination Viewing Head / Signal Processor



Engineered for the Toughest Environments

The U2S Series is uniquely suited for a wide range of flame-detection applications. This all-in-one integrated processor and viewing-head solution features an intuitive touchscreen display and precise, reliable monitoring for single or multi-burner, multi-fuel, and challenging applications that require a high level of flexible discrimination.

Versatile options for models and sensors ensure you can optimize your flame monitoring for even the toughest applications. And as an all-in-one solution, the U2S Series eliminates the need for a separate processor, saving on cabinets and wiring while also simplifying installation and maintenance.



The U2S Series: Integrated Processor and Viewing Head for Versatile Flame Discrimination

The U2S Series is optimized for a wide variety of common applications, including industrial process boilers, co-gen boilers, cement or lime kilns, thermal oxidizers, flare stacks, and gas turbines. The U2S Series is also designed to excel in challenging flame-monitoring applications such as black liquor recovery and sulfur recovery.





Features

- Advanced diagnostic safety 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).
- Updated, fully programmable touchscreen with an easy scrolling menu for an enhanced user experience.
- Two-wire Modbus RTU for external programming, compatible with FlameTools or other master device.
- File Select input/output allows for external control of two preprogrammed 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, 25.4 mm (1 in) 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

Models

PART NUMBER	SENSOR TYPE	DESCRIPTION
U2-1010S	IR / UV Tron / UVSS	Quick-disconnect cable. Suitable for all fuels.
U2-1010S-PF	IR / UV Tron / UVSS	Factory-installed 10 ft cable. Suitable for all fuels.
U2-1010S-PF-050	IR / UV Tron / UVSS	Factory-installed 50 ft cable. Suitable for all fuels.
U2-1010S-PF-100	IR / UV Tron / UVSS	Factory-installed 100 ft cable. Suitable for all fuels.
U2-1012S	IR	Quick-disconnect cable. Suitable for oil and coal.
U2-1012S-PF	IR	Factory-installed 10ft cable. Suitable for oil and coal.
U2-1016S	UV Tron	Quick-disconnect cable. Suitable for gaseous fuels.
U2-1016S-PF	UV Tron	Factory-installed 10 ft cable. Suitable for gaseous fuels.
U2-1018S	IR / UV Tron	Quick-disconnect cable. Suitable for all fuels
U2-1018S-PF	IR / UV Tron	Factory-installed 10 ft cable. Suitable for all fuels.
ASYU2S	Cable	50 ft cable assembly with connector.
ASYU2S-100	Cable	100 ft cable assembly with connector.
ASYU2S-200	Cable	200 ft cable assembly with connector.
ASYU2S-300	Cable	300 ft cable assembly with connector.

Approximate Dimensions: 155 mm (6.1 in) length x 117 mm (4.6 in) diameter

Approvals

FM, CSA, EN298, EAC, pending INMETRO & KTL

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

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02-00052 PR | 04/17
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