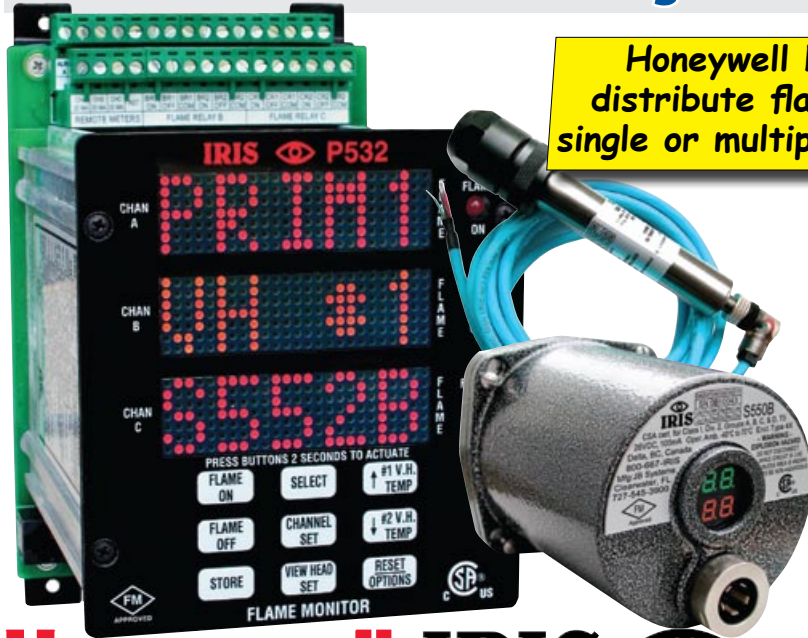


Industrial Flame Monitoring for Continuous Burners

Honeywell has teamed with IRIS Systems to distribute flame detection systems for industrial single or multiple burner and multi-fuel applications.



Honeywell IRIS 

Key Features

- Independent configuration for each sensor
- Store settings in memory for easy replacement
- Proportional 0/4-20mA flame signal output
- Flame and self-check relays
- Viewing head temperature indication
- Electronic shutter for viewing head self-check
- Wide spectral response for difficult-to-site applications
- Adjustable "Flame On" and "Flame Off" points
- Compact UV and IR detectors ideal for pilot monitoring
- Wide gain adjustment and multiple flicker frequency settings prevent flame-out
- Hazardous location viewing head models: Class I, Div 2, Groups A-D, T5 and T4A

Honeywell's flame monitoring systems are ideal for applications in petroleum, petrochemical, pulp, paper, and metals processing industries. Their ability to discriminate in the toughest environments tailors them for industrial process, black liquor recovery, cogeneration or grate-fired burners, cement or lime kilns, Claus (H₂S) reactors, thermal oxidizers, and gas turbines.

These industrial flame monitoring systems are uniquely suited for multiple burner applications, exotic fuels, hostile environments and burner types including combination, low NO_x, opposed fired, hydrogen, duct, and register burners.

Signal Processors

With automatic setup, three channels and the ability to monitor UV and IR flame components simultaneously or separately, the RP532 signal processor offers improved burner up time and reliability.

Each signal processor has a 0/4-20mA scalable flame signal output, two SPDT or SPST flame relays, and one SPDT or SPST self-check relay.

All signal processors are Modbus RTU capable with selectable parity and baud rate settings. Link up to 31 or 63 signal processors (model dependent), in a single daisy chain loop, to FlameTools software.

IRIS RP532 and RP531 signal processors also have 24 VDC auxiliary outputs and three normally open alarm relays.

Dual UV/IR Viewing Heads

Designed for industrial processes, the IRIS CS550B dual UV/IR viewing head delivers flame discrimination in the toughest environments.

UV and IR sensing capabilities are housed within one detector to provide application flexibility. Their ability to discriminate between all types of fuels, the main flame and unwanted background, make them uniquely suited for multiple industrial processes.

Individual UV and IR Viewing Heads

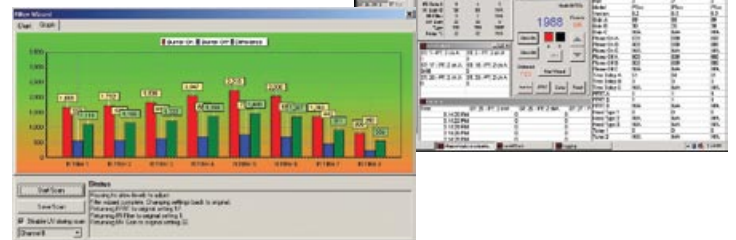
Multiple housing sizes and gain settings in both UV and IR to fit your application, in single and multiple burners or pilot monitoring processes.

Remote Configuration, Monitoring, and Diagnostics

You can easily interface multiple signal processors through FlameTools software for remote configuration, monitoring and diagnostics. The user-friendly graphical interface provides intuitive configuration options for settings and outputs. Software runs on a Windows®-based PC or a Palm®-powered handheld device. It provides access to:

- Flame strength in numeric, graphic, or spreadsheet format
- Simultaneous display of multiple devices and channels
- Configuration control with easy-to-use sliders
- Data logging, with the ability to save process details to spreadsheet
- Filter wizard that automatically saves and compares flame readings for all filter settings
- Ability to save configuration of connected devices to a spreadsheet
- Automatic device detection for serial ports

Handheld version of FlameTools adds global adjust function, so you can set one or more parameters to identical values for all units connected on a loop.



Signal Immunity

All viewing heads are immune to X-Rays and Gamma rays, making them ideal for myriad industrial applications.



Industrial Flame Monitoring for Continuous Burners



Honeywell has teamed with IRIS Systems to distribute flame detection systems for industrial single or multiple burner and multi-fuel applications.



R700 Signal Processors for Single Burner Applications

One channel signal processor with DIN-rail mounting, plug-in terminals, two-digit numeric display, keypad, and status LEDs. NEMA 1 enclosure.

Outputs: 0/4-20 mA scalable, two SPDT flame relays, one SPDT self-check relay, power detectors

Processor Power: 85-265 VAC 50/60 Hz or 22-26 VDC

Programmed via: Keypad

Ambient Temperature Range: 32° to 140°F

Approvals: FM, CSA

Compatible Viewing Heads: One CS70x or CS80x



Model Selection Guide

Description	Catalog Number	Price
Single Burner Signal Processor, AC	R700A1000	\$1465.81
Single Burner Signal Processor, DC	R700S1012	1264.62

R800 Signal Processor for Single Burner Applications

One channel signal processor with DIN-rail mounting, terminals, and status LEDs. NEMA 1 enclosure.

Outputs: 0/4-20 mA scalable (non-isolated), two SPST flame relays, one SPST self-check relay, power detectors

Processor Power: 85-265 VAC 50/60 Hz or 22-26 VDC

Programmed via: Model 800 firmware

Approvals: FM, CSA

Ambient Temperature Range: 32° to 140°F

Compatible Viewing Heads: One CS70x or CS80x



Model Selection Guide

Description	Catalog Number	Price
Single Burner Signal Processor, AC	R800S1008	\$1101.76
RS232 to RS485 Program Cable	50036824-005	214.60



CS70x/CS80x Viewing Heads

Viewing head with quick disconnect plug and 15-ft cable, 1-9 gain selection

Enclosure: IP67, NEMA 4/4X with tightened connector and UV cable protection

Approvals: FM, CSA Class 1, Div 2, Groups A-D, T4A

Ambient Temperature Range: -40° to 185°F

Compatible Signal Processors: RP531 and RP532 series multiburner processors, R700 and R800 single burner processors



Model Selection Guide

Description	Catalog Number	Price
Aluminum housing over center latches		
Infrared Viewing Head	CS702A1004	\$1877.77
Ultraviolet Viewing Head	CS706A1012	1877.77
Stainless steel housing with friction twist lock		
Infrared Viewing Head	CS802A1020	\$1609.52
Ultraviolet Viewing Head	CS806A1038	1609.52
Cable with Braided Shield (per Ft)	50036824-330	4.89
15' Cable with LED, Braided Shield	50036824-782	329.95

Flare Stack Pilot Monitoring



IRIS Watchdog Signal Processor and Viewing Head

One channel signal processor for UV flare stack monitoring, with mounting base, plug-in terminals, four-digit alphanumeric display, keypad, and status LEDs. Watchdog III UV flare stack viewing head with digital display, quick disconnect plug and 0-99 gain selection.

Processor Outputs: 0/4-20 mA scalable, two SPDT early indication, one SPDT delayed indication, power detector

Processor Power: 85-265 VAC 50/60 Hz

Programmed via: Keypad or FlameTools software

Ambient Temperature Range: Processor: 32° to 140°F; Viewing Head: -40° to 140°F

Enclosure: Processor: NEMA 1; Viewing Head: IP67, NEMA 4X

Approvals: CSA Special Acceptance



Model Selection Guide

Description	Catalog Number	Price
Flare Stack Signal Processor, AC	RP222A1006	\$5365.07
FlameTools Software	50036824-001	1906.52
USB to RS422 Comm Module	50036824-422	446.45
Flare Stack UV Viewing Head	CS256B1017	6131.51
Cable with Braided Shield (per Ft)	50036824-328	6.32

Multiburner and Multi-Fuel Applications

RP522 Signal Processors

Signal processor with mounting base, plug-in terminals, two channel toggle, four-digit alphanumeric display, keypad and status LEDs. NEMA 1 enclosure.



Processor Power: 85-265 VAC 50/60 Hz or 22-26 VDC

Outputs: 0/4-20 mA scalable, two SPDT flame relays, one SPDT self-check relay, power detectors

Programmed via: Keypad or FlameTools software

Approvals: FM, CSA

Ambient Temperature Range: 32° to 122°F

Compatible Viewing Heads: Two CS55xB models

Model Selection Guide

Description	Catalog Number	Price
Multiburner Signal Processor, AC	RP522A1004	\$3846.75
Multiburner Signal Processor, DC	RP522D1018	3846.75
FlameTools Software	50036824-001	1906.52
USB to RS422 Comm Module	50036824-422	446.45

RP531 Signal Processors

Signal processor with mounting base, plug-in terminals, three channels and status LEDs. Compatible with RP532U detachable programmer/keypad. NEMA 1 enclosure.



Processor Power: 85-265 VAC 50/60 Hz or 22-26 VDC

Outputs: 0/4-20 mA scalable, 24 VDC @ 50 mA aux out, six SPDT flame relay, one SPDT self-check relay, three normally open alarm relays, power detectors

Programmed via: Detachable RP532U1032 program interface or FlameTools software

Ambient Temperature Range: FM: -40° to 140°F; CSA: 32° to 125°F

Approvals: FM, CSA

Compatible Viewing Heads: Two CS55xB and one CS70x or CS80x

Model Selection Guide

Description	Catalog Number	Price
Multiburner Signal Processor, AC	RP531A1002	\$3732.17
Multiburner Signal Processor, DC	RP531D1024	3182.83
Keypad/Programming Interface	RP532U1032	2162.89
FlameTools Software	50036824-001	1906.52
USB to RS422 Comm Module	50036824-422	446.45

Keypad interface lets the RP531 function like the RP532.

RP532 Signal Processors

Signal processor with mounting base, plug-in terminals, three channels, three tri-color alphanumeric scrolling displays, keypad, and status LEDs. NEMA 1 enclosure.



Processor Power: 85-265 VAC 50/60 Hz or 22-26 VDC

Outputs: 0/4-20 mA scalable, 24 VDC @ 50 mA aux out, six SPDT flame relay, one SPDT self-check relay, three normally open alarm relays, power detectors

Programmed via: Keypad or FlameTools software

Ambient Temperature Range: FM: -40° to 140°F; CSA: 32° to 125°F

Approvals: FM, CSA

Compatible Viewing Heads: Two CS55xB and one CS70x or CS80x

Model Selection Guide

Description	Catalog Number	Price
Multiburner Signal Processor, AC	RP532A1026	\$5375.80
Multiburner Signal Processor, DC	RP532D1034	5074.01
FlameTools Software	50036824-001	1906.52
USB to RS422 Comm Module	50036824-422	446.45

CS55 Viewing Heads with Digital Displays

Viewing head with digital display(s), quick disconnect plug, IR high pass filter and 0-699 gain selections, 0-99 UV gain selection



Enclosure: IP67, NEMA 4X

Approvals: CSA: Class 1, Div 2, Groups A-D, T5; FM

Ambient Temperature Range: -40° to 122°F

Color Code: UV and IR: White; IR: Red; UV: Blue














Compatible Signal Processors: RP522, RP531, and RP532 series multiburner processors

Model Selection Guide

Description	Catalog Number	Price
Ultraviolet/Infrared Viewing Head	CS550B1009	\$4727.97
Infrared Viewing Head	CS552B1025	3520.83
Ultraviolet Viewing Head	CS556B1033	3923.21
Cable with Braided Shield (per Ft)	50036824-328	6.32



Finding the Right Honeywell IRIS System for Your Application

													
		<p>R700 Single burner signal processor. One channel, two-digit numeric display, keypad, and status LEDs Outputs 0/4-20 mA scalable (non-isolated), Two SPST flame relays, One SPST self-check relay Power to detector</p>	<p>R800 Single burner signal processor One channel with status LEDs Outputs 0/4-20 mA scalable, Two SPDT flame relays, One SPST self-check relay Power to detector</p>	<p>RP222A1006 Flare stack pilot monitoring signal processor One channel, four-digit alphanumeric display, keypad, and status LEDs Outputs 0/4-20 mA scalable, Two SPDT early indication, One SPDT delayed indication, Power to detector</p>	<p>RP522 Multi-burner, multi-fuel signal processor Two-channel toggle, four-digit alphanumeric display, keypad, and status LEDs Outputs 0/4-20 mA scalable, Two SPDT flame relays, One SPDT self-check relay Power to detectors</p>	<p>RP531 Multi-burner, multi-fuel signal processor Three channels with status LEDs Detachable programmer and keypad optional Outputs 0/4-20 mA scalable, 24 VDC @ 50 mA aux out, Six SPDT flame relays, One SPDT self-check relay, Three normally-open alarm relays, Power to detectors</p>	<p>RP532 Multi-burner, multi-fuel signal processor Three channels, three tri-color alphanumeric scrolling displays, keypad, and status LEDs Outputs 0/4-20 mA scalable, 24 VDC @ 50 mA aux out, Six SPDT flame relays, One SPDT self-check relay, Three normally-open alarm relays, Power to detectors</p>						
<p><i>Honeywell IRIS Signal Processor and Viewing Head Compatibility Chart</i></p>		<p>CS702/CS706 Compact aluminum viewing heads for UV or IR</p>	✓	✓					✓	✓			
		<p>CS802/CS806 Compact stainless steel viewing heads for UV or IR</p>	✓	✓					✓	✓			
		<p>CS256B1017 Watchdog III UV flare stack viewing head with digital display</p>			✓								
		<p>CS550B1009 Combination UV/IR viewing head with digital display</p>					✓	✓	✓	✓			
		<p>CS552B1025 IR viewing head with digital display</p>					✓	✓	✓	✓			
		<p>CS556B1033 UV viewing head with digital display</p>					✓	✓	✓	✓			

Learn more about Honeywell IRIS products online at www.lesman.com.