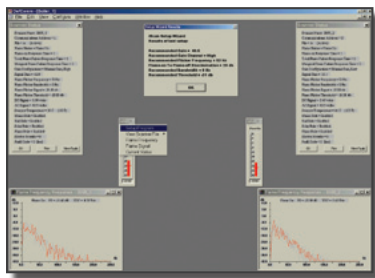




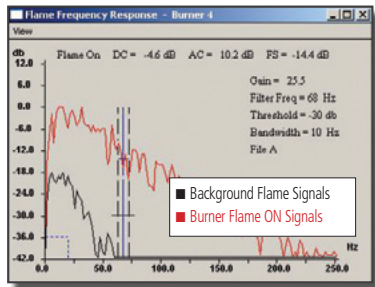
FLAME SIGNALS, SETTINGS & OVERVIEW



## iScan2™ Flame Scanner Innovative Technology

Coen Company introduces the *iScan2*™ flame scanner, a commercially available flame scanner able to differentiate real flame signals from simulated flame signals to ensure safe operation in utility, industrial and other combustion-related applications. Based on decades of Coen's proven flame scanner technology, *iScan2*™ flame scanners help users operate safely and reliably while minimizing maintenance costs. The *iScan2*™ flame scanner easily retrofits existing scanners and interfaces with other control systems and displays.

BACKGROUND FLAME AND FLAME ON SIGNALS



### SUPERIOR SAFETY FEATURES

The *iScan2*™ flame scanner is designed with an internal temperature-monitoring capability, so operators can configure pre-alarm conditions to prevent premature scanner failure due to excessive heat or ambient conditions.

The *iScan2*™ flame scanner's reliable solid-state sensor and electronic self-checking capability eliminate the need for UV tubes that are known to fail in unsafe conditions.

Relay contacts can be configured to meet SIL3-level applications and provide independent outputs, resulting in a safer flame scanner system.

### REMOTE COMMUNICATIONS AND DIAGNOSTICS

*iScan2*™ flame scanners incorporate HART Communications, a globally accepted communication protocol that runs over the scanner's existing 4-20mA output and can be read by a Distributed Control System,

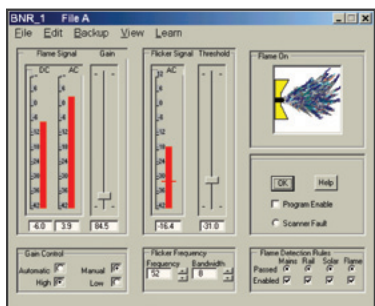
just like you would any other transmitter in a plant. The information provided over HART Communications allows the operator to make more informed process decisions and to reduce downtime when troubleshooting problems.

The *iScan2*™ flame scanner's software tuning functions allow the flame data to be recorded, saved and analyzed. This capability is ideal for troubleshooting improper combustion or ignition problems, helping avoid nuisance shutdowns or incidents.

### ADVANCED FLAME-SCANNING FEATURES

- Enhanced flame detection and discrimination
- Double the analog and digital outputs
- Remote communications and diagnostics
- Higher temperature capabilities

SETUP/CONTROL PANEL





## **iScan2™ Flame Scanner Specifications**

Spectral Response	Dual UV/IR with UV peak at 350nm and IR peak at 700nm
Power	24 VDC nominal, 3.36 VA (140 mA), 20-28 VDC operational.
Electrical Connection	NEMA 4x/IP66 has military quick disconnect cable at selectable lengths; C1D1/ATEX model has factory-installed, 10 foot (3 m) leads. Both versions are 14 conductor, shielded.
Mechanical Connection	1" NP T(F) via heat insulating mounting flange; FOX version adapted for fiber-optic assembly.
Dimensions	2.5" (6.35cm) diameter by 10" (25.4cm) length; 12.1" (30.7cm) length including mounting adapter.
Inputs	Four digital inputs for remote file selection (File A, B, C and D).
Relay Output	One N.O. voltage free (dry) flame relay contact and one N.O. voltage free (dry) fault relay contact; 0.5A @ 125Vac and 1A @ 24Vdc.
Analog Output	Two 4-20 mA outputs (current sourced, 750 Ohm max). One for flame intensity and one for raw signal output or internal scanner temperature.
Communications	RS485 via DSFComm, 128 kB, 127 scanners per loop, up to 5,000 ft (1524 m) and HART communications over 4-20mA wiring.
Response Time	1-4 seconds adjustable
Relative Humidity	100%, condensing
Housing & Weight	NEMA 4x, IP66 (3.41 lb, 1.54 kg). NEMA 7 (Class 1, Division 1 & 2, Groups B, C & D), ATEX II 2 G/D Exd IIC T5 & Ex tDd A21 and IECEx FM3 10.0004X (3.8 lb, 1.72 kg)
Approvals	FM, UL, CSA, CE (EN298 and EN230), GOST, ATEX, IECEx, and CCOE. iScan2™ flame scanners are third-party tested and verified for use in SIL3 applications based on the guidelines in IEC 61508.

*With thousands of units installed worldwide, Coen's scanner technology is proven to be reliable and cost-effective for oil, gas, or coal flames. Improve the performance of your system...*

**Contact Coen today and put the iScan2™ flame scanner to work for you.**



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