

# INSIGHT

## scanners

## INTEGRATED FLAME SCANNER with INTERNAL FLAME RELAY

Type 95IR/95UV/95DS



The FIREYE InSight Type 95IR, 95UV, and 95DS flame scanners are micro-processor based flame scanners utilizing solid state infrared (IR), ultraviolet (UV) or dual (IR and UV) sensors.

The FIREYE InSight Type 95 flame scanners incorporate an internal flame relay with adjustable ON/OFF thresholds, thereby eliminating the need for a remote flame amplifier.

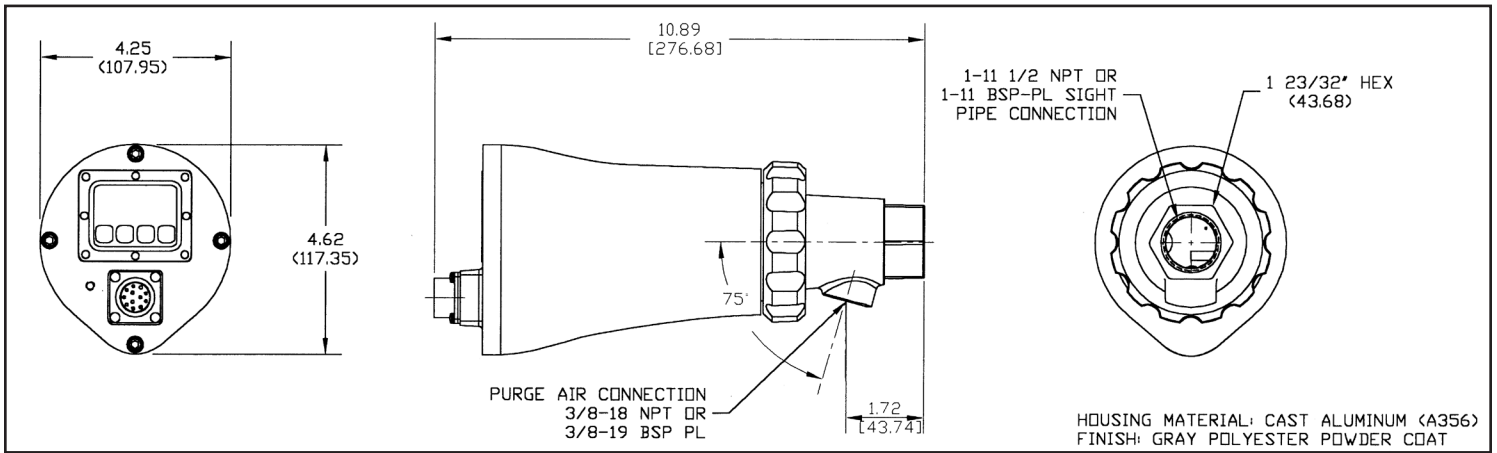
All FIREYE InSight scanner models are powered by 24 Vdc, have either a twelve-pin electrical quick-disconnect or 10 ft. cable ("CG" models), and

contain electronic self-checking (no mechanical shutter required). The scanners contain an eight character alpha-numeric LED display and a four push-button keypad to enable the user to view operating parameters and select setpoints.

### INSIGHT SCANNER FEATURES

Features	Basic Models (S1)			Expanded Models (S2)		
	95IR S1	95UV S1	95DS S1	95IR S2	95UV S2	95DS S2
Infrared Sensor	✓		✓	✓		✓
Ultraviolet Sensor		✓	✓		✓	✓
Flame Relay	✓	✓	✓	✓	✓	✓
Fault Relay	✓	✓	✓	✓	✓	✓
4-20 mA Output	✓	✓	✓	✓	✓	✓
Modulation Frequency Selections	3	3	3	21	21	21
Memory Files	2	2	2	4	4	4
Communications				✓	✓	✓
AutoTune				✓	✓	✓
Pre-Edit	✓	✓	✓			

## INSIGHT SCANNER DIMENSIONS



## INSIGHT SCANNER SPECIFICATIONS

### MECHANICAL:

Housing Material:	Cast aluminum with gray polyester powder coat finish
Housing Weight:	4.3 lbs (1.96kg) or 5.9 lbs. (2.70kg) "CG" models, flange additional
Environmental:	NEMA 4X, IP66, Class 1 division II Groups A, B, C, D Hazardous areas
Mounting:	Requires one of two threaded mounting flanges, ordered separately (see below)
Mounting Flanges:	P/N 60-2692 - 1" NPT female pipe mount with 3/8" NPT female cooling air connection, includes 1" NPT x 3" long heat insulating nipple (P/N 35-127-1) P/N 60-2693 - 1" BSP female pipe mount with 3/8" BSP female cooling air connection, includes 1" BSP x 3" long heat insulating nipple (P/N 35-127-3)
Mounting Flange Weight:	0.62 lbs (0.28kg)
Cooling / Purge Air Requirements:	Source: Clean, dry, cool Volume: 4 SCFM (113 l/min) at 3/8" threaded mounting flange, or 1 inch "Y" fitting, mounted on scanner sight pipe. Temperature near the upper limit of the scanner operating range and/or use with dirty/dusty fuels may require up to 15 SCFM (425 l/min). Pressure: Adequate to overcome furnace or windbox pressure
Temperature Rating:	-40° F to + 150°F (-40°C to +65°C)
Humidity:	0% to 95% relative humidity, non-condensing

### ELECTRICAL:

Input Power:	24 Vdc, +10%, -15% supply current 0.35 A, 8.5 VA
Electrical Connection:	12-pin quarter-turn quick-disconnect or 10 ft. (3m) captive cable ("CG" models)
Relay Output:	FLAME RELAY, SPST (N.O.) FAULT RELAY, SPST (N.C.)
Contact Rating:	Minimum: 10 mA @ 5 Vdc Maximum: 2 A @ 30 Vdc 2 A @ 50 Vac (CE approved non "CG" models) 2 A @ 240 Vac (all FM and CSA models, all "CG" models)
Analog Output:	4-20 mA dc current, referenced to 24 Vdc common, maximum connected load: 750 ohms
Status Indication:	Eight (8) character alpha-numeric LED display (scrolling capability)
Operator Interface:	Four (4) pushbutton style keys
Cable Specification:	P/N 59-497: Multi-core, 12 conductor (color coded), with overall braided shield Six #18 AWG and four #22 AWG conductors, plus one #22 AWG twisted pair Cable Jacket: Irradiated Modified Polyolefin (flame-retardant, low smoke, zero halogen) Nominal O.D. 0.41" (10.4 mm) Maximum O.D. 0.43" (10.9 mm) Maximum cable length 1000 feet (305 meters)



**Thinking Beyond the Traditional...**

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