# InSight<sup>®</sup> Flame Scanners



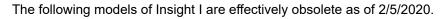
# Integrated Flame Scanner with internal flame relay 95IR / 95UV / 95DS

## Microprocessor-based flame scanner utilizing solid-state infrared (IR), ultraviolet (UV) or dual (IR/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.





Original Part Designation	Recommended Replacement Part
95UVS1-1 (all versions including E's)	95UVS4-1WINC
95UVS1-1CG (all versions including E's)	95UVS4-1WINC with associated cable
95IRS1-1 (all versions including E's)	95IRS4-1WINC
95IRS1-1CG (all versions including E's)	95IRS4-1WINC with associated cable
95UVS2-1 (all versions including E's)	95UVS4-1WINC
95UVS2-1CG (all versions including E's)	95UVS4-1WINC with associated cable
95IRS2-1 (all versions including E's)	95IRS4-1WINC
95IRS2-1CG (all versions including E's)	95IRS4-1WINC with associated cable
95UVS2-1CEX (all versions including E's)	95UVS4-1CEX
95IRS1-1CEX (all versions including E's)	95IRS4-1CEX



# InSight Flame Scanners

# **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 I Div 2, 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)

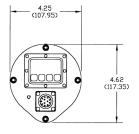
ELECTRICAL

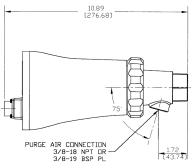
Contact Rating	Minimum: 10 mA @ 5 Vdc Maximum: 2 A @ 30 Vdc 2 A @ 50 Vac (CE approved non "CG" models) 2 A @ 240 Vac (all FM and CSA models, all "CG" models)
Analog Output	4-20mA dc current, referenced to 24 VDC common, maximum connected load 750 ohms
Status Indication	Eight (8) character alpha-numeric LED display (scrolling capability)
Operator Interface	Four (4) pushbutton-style keys

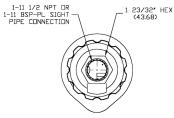
### **CABLE SPECIFICATION**

P/N 59-497	Multi-core, 12 conductor (color coded) with overall braided shield Six #18 AWG and four #22 AWG conduc- tors, plus one #22 AWG twisted pair Cable jacket: Irradiated Modified Poly- olefin (flame-retardant, low smoke, zero halogen) Nominal outer diameter: 0.41" (10.4mm) Maximum outer diameter: 0.43" (10.9mm) Maximum cable length: 1,000 ft. (305m)
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## **Dimensions**







HOUSING MATERIAL: CAST ALUMINUM (A356) FINISH: GRAY POLYESTER POWDER COAT

### **COOLING/PURGE AIR REQUIREMENTS**

Source	Clean, dry, cool
Volume	4SCFM (113 l/min) at 3/8" threaded mounting flange, or 1" "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 V A
Electrical Connection	12-pin quarter-turn quick-disconnect or 10ft. (3m) captive cable ("CG" models)
Flame Relay Ouput	SPST (N.O.)
Fault Relay Output	SPST (N.C.)