FLAME SCANNERS AND APPLICATIONS

The following Fireye flame scanners are used in conjunction with the appropriate Fireye flame safeguard controls to provide reliable flame detection on a variety of burner applications and fuel types.

UVIA   Bulletin SC-102

Ultraviolet miniature non self-checking scanners. The UV1A is suitable for fuel gases and no. 2 oil. Non-replaceable tube. Mounting collar 1/2" NPT. Available with 3 ft (UV1A3), 6 ft. (UV1A6), or 50 ft. (UV1A50) of tray-rated cable. Explosion proof housings are available.

UV90   Bulletin SC-102

Ultraviolet miniature non self-checking scanner suitable for frontal or side (90°) viewing. Complete with mounting fixture. Available with 3 ft (UV90-3), 6 ft. (UV90-6), or 9 ft. (UV90-9) of flexible conduit.

UV2   Bulletin SC-103

Ultraviolet miniature non self-checking scanner. Similar in function to the UV1A3 but with a smaller mounting collar (3/8"). Non-replaceable tube.

UV8A   Bulletin SC-102

A 90° version of the UV1A6, but with unshielded leads and 0.70" diameter collar to be used with a 1/2" E.M.T rain tight fitting (not furnished). The mounting collar is 1/2" NPT. Must be installed with metal shielding over the scanner leads.

45UV5-1005, -1006, -1007, -1009   Bulletin SC-103

Self-checking ultraviolet scanner is for continuously fired applications where recycling is infrequent or absent. The self-checking circuit checks the electronics and the UV tube for proper operation every four seconds during the firing period. Suitable for fuel gases and oil. Replaceable UV tube and (4-314-1) shutter mechanism (61-2914-1). Mounting 1" NPT or BSP pipe thread with 6 ft. (1.8m) lead wires. Must be installed with metal shielding over the scanner leads. Explosion-proof housings are available for models 45UV5-1005, 45UV5-1007, and 45UV5-1009.

45UV3-1050

A rugged diecast housing that mounts on 3/4 inch pipe with setscrew. Vertical mounting of UV tube provides greater sensitivity. UV tube is replaceable (4-314-1). Scanner is non self-checking. 4 ft (1200mm) lead wires. Must be installed with metal shielding over this canner leads.

55UV5-1007, -1009

Self-checking ultraviolet scanner is for continuously fired applications where recycling is infrequent or absent. Similar in function to the 45UV5 but suitable for use in Class I, Div. 2, Groups A, B, C, D and Class II, Div. 2, Groups F and G hazardous areas. Rated NEMA 4X, IP66. Replaceable UV tube (4-314-1), and shutter mechanism (61-7075-1). Mounting 1" NPT or BSP pipe thread with 20 ft (6M) of five conductor cable.

69ND1

Flame rod for gas flames only. The flame rod is an inexpensive reliable gas flame detector. Mounting 1/2" male NPT. 12" (304mm), 18" (475mm), and 24" (609mm) available.

48PT2

Lead sulfide infrared scanner is designed to detect low frequency IR signals from gas or oil flames. Mounting collar is 1/2" NPT with straight or 90° mounts (shown). Available with 4 ft (121.9m) or 8 ft (243.8m) flexible conduit. Replaceable 4-263-1 sensor cell.

PART NUMBER	DESCRIPTION	USE WITH	BULLETIN
Ultraviolet Scanners			
UV1A-1-CEX	ATEX Exd IIC T6 explosion-proof housing with UV1A scanner.	Flame -Monitor, FlameWorx, MB, C-Series, D-Series, M-Series, M-II Series, MicroM Series with non-self check amplifier.	SC-102
UV1A3	$^1/_2$" NPT Connector, 3 ft. (914mm) tray-rated cable. Non self-checking.		
UV1A6	$^1/_2$" NPT Connector, 6 ft. (1828mm) tray-rated cable. Non self-checking.		
UV1A50	$^1/_2$" NPT Connector, 50 ft. tray-rated cable.Non self-checking.		
UV2	$^3/_8$" NPT Connector, 3 ft. (914mm) tray-rated cable. Non self-checking.		
UV8A	$^1/_2$" NPT 90° head, 6 ft. wire, no cable. Non self-checking.		
UV90-3	UV non-self check scanner for frontal or side (90°) viewing. Complete with mounting fixture and 3 ft. (900mm) flex conduit.		
UV90-6	UV non-self check scanner for frontal or side (90°) viewing. Complete with mounting fixture and 6 ft. (1800mm) flex conduit.		
UV90-9	UV non-self check scanner for frontal or side (90°) viewing. Complete with mounting fixture and 9 ft. (2700mm) flex conduit.		
45UV3-1050	UV Scanner, $^3/_4$" sleeve/set screw mounting. Non self-checking.		
45UV5-1005	UV self-check scanner 1 inch NPT threads. 25VDC shutter circuit.	25RU8-4580, 25SU5-4018 or 61-5745-3 shutter drive module	SC-101
45UV5-1105	Same as -1005 but British threads.	25RU8-4580, 25SU5-4018 or 61-5745-3 shutter drive module	SC-101
45UV5-1006	UV self-check scanner. Use with self-check amplifier only, 1 inch NPT threads.	D-Series, 72DUVS1 only	SC-101
45UV5-1007	UV self-check scanner. Use with self-check amplifier. 1 inch British threads, 120-230 VAC shutter.	Flame-Monitor, C-Series, D-Series, MicroM Series with self-check amplifier.	SC-101
45UV5-1007CEX	ATEX Exd IIC T6 explosion proof housing with 45UV5-1007 scanner.		
45UV5-1009	UV self-check scanner. Use with self-check amplifier. 1 inch NPT threads, 120-230 VAC shutter.		
45UV-1009CEX	ATEX Exd IIC T6 explosion proof housing with 45UV5-1009 scanner.		
45UV5-1009EX	Explosion proof 45UV5-1009. Class I, Div. 1 and 2, Groups C and D. Class 2 Div. 1 and 2, Groups E, F, G.		
Infrared Scanners			
48PT2-CEX	ATEX Exd IIC T6 explosion proof housing with 48PT2 scanner	Flame-Monitor, C-Series, D-Series, MicroM Series with infrared amplifier.	SC-103
48PT2-1003	IR Scanner, 8 ft. (2400mm) tray-rated cable, straight head		
48PT2-1007	IR Scanner, 4 foot (1200mm) tray-rated cable, straight head		
48PT2-9003	48PT2-1003, 8 ft. tray-rated cable with 90° head		
48PT2-9007	48PT2-1007, 4 ft. tray-rated cable with 90° head		
69ND1-1000K4	Flame Rod 12 inches $^1/_2$" mount	Flame -Monitor, FlameWorx, MB, C-Series, D-Series, M-Series, M-II Series, MicroM Series with flame rectification amplifier.	SC-103
69ND1-1000K6	Flame Rod 18 inches $^1/_2$" mount		
69ND1-1000K8	Flame Rod 24 inches $^1/_2$" mount		