

INSTALLATION AND MAINTENANCE INSTRUCTIONS

Connect these detectors only to a Napco listed-compatible control panel: Series GEM-P816, GEM-P1632, GEM-P1664, F-64, Series GEM-P3200, GEM-P9600, GEM-X255, Series GEMC-32, GEMC-96, GEMC-128, GEMC-255, Series FL-32FACP-xxxxx, FL-96FACP-xxxxx FL-128FACP-xxxxx, FL-255FACP-xxxxx, Series XP-600, GEM-P800, GEM-P801. Refer to the control panel installation manual for additional instructions. Smoke detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

FW-2-E Conventional Photoelectric Smoke Detector and Base					
Sensing Element	Smoke	IR LED, Blue LED, Photodiode			
		Blue LED enhances the photoelectric smoke sensor to reduce sensitivity to false alarms and increase sensitivity to fire conditions.			
Supply Voltage	Operating Voltage Range		8 – 35VDC		
	Maximum Voltage Ripple		8200mVAC		
Current Consumption	Standby Current		59μΑ		
	Alarm Current		5mA (Min), 150mA (Max)		
Startup	Cold Start Time		25s (Max)		
	Alarm Verification Restart		20s (Max)		
	Time				
	Current		160µA (Max)		
Included Separable Base	FW-2-EH6-BASE (HB-55) 6 inch diameter base				
Included Separable Head	FW-2-E-HEAD (Detector ID HD-3) Smoke Detector				
Temperature	UL Listed Ambient: 32F ~ 120F, Storage: -22F ~ +140F				
Operating Humidity	<95%RH at 104F, <80%RH at 120F				

FW-2-	H-E Conven	tional Photoelectric	Smoke and Heat Detector and Base	
Sensing Element	Smoke	Smoke IR LED, Blue LED, Photodiode		
		Blue LED, thermisto	r enhance the photoelectric smoke sensor to reduce	
		sensitivity to false alarms and increase sensitivity to fire conditions.		
	Heat	Thermistor		
Heat Sensitivity Range	135F			
Supply Voltage	Operating Voltage Range		8 – 35VDC	
	Maximum Voltage Ripple		8200mVAC	
Current Consumption	Standby Current		59µA	
	Alarm Current		5mA (Min), 150mA (Max)	
Startup	Cold Start Time		25s (Max)	
	Alarm Verification Restart		20s (Max)	
	Time			
	Current		160μA (Max)	
Included Separable Base	FW-2-EH6-BASE (HB-55) 6 inch diameter base			
Included Separable Head	FW-2-H-HEAD (Detector ID HD-3) Smoke and Heat Detector			
Temperature	UL Listed Ambient: 32F ~ 117F, Storage: -22F ~ +140F			
Operating Humidity	<95%RH at 104F, <80%RH at 120F			

SEPARABLE BASE SPECIFICATIONS						
MODEL	Base ID	Alarm Current	Mounting Box			
FW-2-EH6-BASE	HB-55	150mA ^{limit by panel} @15.0 - 33.0V max	4"Octogonal / 4"Square			

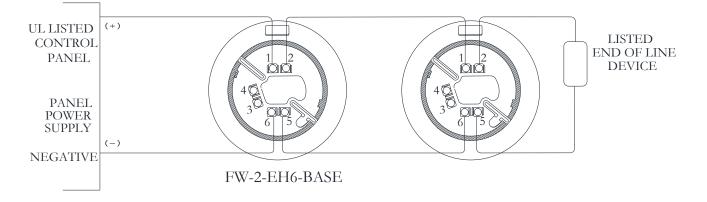
CAUTION

Install this and all life safety devices in accordance with applicable NFPA standards, local codes, and the authorities having jurisdiction. Failure to follow these instructions may result in failure of the detector to initiate an alarm condition. Napco Security Systems, Inc. and the original equipment manufacturer, are not responsible for detectors that have been improperly installed, tested, or maintained.



Wiring Detectors

Seal conduit openings in the electrical box with 3M Weatherban #606 nonflammable sealing compound (or equivalent) to reduce the stack effect. Attach the detector to the base by turning the detector clockwise until it stops.



Placement of Detectors

Following the guidelines in NFPA 72 and local codes, base the number and location of detectors on an engineering survey of the area to be protected. Factors to consider include: Contents to be protected, Type of construction and use of structure, Human occupancy, Burning characteristics of contents, Space involved, Height of ceiling, Surface condition of ceiling, Total area, Air movement (stratification), Vent location (velocities and dilution), Deflections and obstructions

- One smoke detector covers 450 to 900 square feet
- You may use 30' spacing on smooth ceilings for all smoke detectors
 * Beams or other obstructions extending more than 8" but less than 18" require reduced spacing at the perpendicular of the obstructions. Beams or other obstructions extending more than 18" below the ceiling should designate a new separation point and be considered a border for a new section.

WARNING: Do not install smoke detectors in the following areas:

- Where temperatures are likely to exceed the operating temperature range specified by detector
- Closer than 4" to any side wall
- Where forced ventilation can dilute the smoke from a fire
- In known areas of combustion such as kitchens or furnace rooms
- In known areas of sustained corrosive atmospheres such as industrial chemical processing areas

Maintenance

Cleaning

Use clean, dry compressed air to remove dust from a detector, or return to Napco for service. Disassembly of the detector may result in the failure of the detector to initiate an alarm condition or initiation of a false alarm condition.

Testing

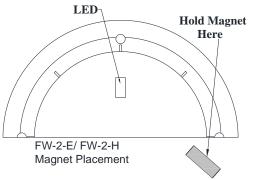
For a smoke detector to operate efficiently, the combustion products must enter the outer chamber. Air flow, stratification, velocity, stagnation, and migration all affect the efficiency and accuracy of the detector. Use an air flow meter to determine the movement of the air within a structure. Consult local codes and ordinances for maintenance requirements. Napco recommends a bi-annual functional testing and visual inspection.

Prior to testing any detector, care should be exercised to ensure proper disabling of live signals and notification circuits of the Fire Alarm Control Panel. Failure to exercise this procedure may result in false alarm signals which could place life and property in jeopardy.

Caution: Excessive aerosol smoke can contaminate a detector. Do not spray in bursts longer than 1 second. Wait 20 seconds between sprays. Test with Smoke Sabre aerosol cans or Testifier 1000/1001 or 2000/2001 with TS3 smoke capsules/ heat setting per manufacturer's instructions. LED $_{2}$

GO/NO-GO TESTING FW-2-E / FW-2-H-E

- 1. Hold a magnet (2lb pull force min) on the detector as shown.
- 2. For go: The detector will blink red. Holding the magnet In position will cause the detector to alarm with a continuous
- Red LED latched.For no-go: The detector will continue to blink red and never alarm or latch red.
- 4. Upon reset, the detector LED should flash Green.





WI2485ALF 01/23 PAGE 2 of 2