

by Honeywell

## Description

The Gamewell-FCI XP95-P analog addressable photoelectric sensor operates with the Gamewell-FCI, 600 Series and ILI95-E3 Series Fire Alarm Control Panels (FACPs). The photoelectric sensor digitally transmits its address and the chamber's analog values to the FACP for analysis. The photoelectric sensor is distinguished by the clear status LED, which flashes red briefly when the device is polled and turns on continuously when the device is in alarm.

### Operation

The XP95-P photoelectric sensor constantly monitors its sensing chamber and its internal electronics. The results are then reported along with the unit's address through the integral communications electronics located in the sensor head. The XP95 photoelectric sensor utilizes a patented smoke chamber and infrared smoke sensing design. The infrared emitter generates a burst of light every second, or in response to direct interrogation.

In clean air, the photo diode receives no light from the emitter because of the arrangement of the chamber. When smoke enters the chamber, it scatters light from the emitter onto the photo diode receptor in proportion to smoke characteristics and density. As the smoke content in the chamber increases, the signal from the photo diode receptor increases. This information is processed and conditioned by an on-board, advanced-technology ASIC and digitally transmitted to the FACP.

Trouble and Alarm conditions of the XP95 sensors are actually determined at the control panel. The status information of each sensor is analyzed for off-normal conditions by the FACP. If the sensor reports a condition that matches its programmed trouble signature, the FACP will detect that the sensor is in trouble and will follow its programmed response sequence. If the status reported matches the alarm signature, the FACP will follow the programmed alarm response for the specific device in alarm. When a sensor is in alarm, the integral LED in the sensor's housing will light continuously.

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## Photoelectric Smoke Sensor



XP95-P

## Features

- Compatible with the following Gamewell-FCI analog addressable fire alarm control panels
  - 600 Series
  - ILI95-E3 Series
- Fits in 4.0" (10.16 cm) or 6.0" (15.24 cm) ultra-low-profile E-Z fit bases
- Includes an audible alarm sounder base
- Contains a four-wire relay base
- Stores the address in the sensor base
- Sets the address by an XPert addressing card
- Provides a two-color status LED
- Offers an infrared smoke sensing design
- Transmits continuous communications
- Includes an optional remote LED

SIGNALING



LISTED  
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MEA  
Approved

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## Operation (Continued)

The XP95-P photoelectric device is connected to a two-wire SLC carrying both data and a 17 to 28 VDC supply voltage. It is insensitive to loop connection polarity. A remote LED indicator may be connected. The device is compatible with point-or group-addressable relay and sounder bases.

## Engineer's Specifications

The contractor shall furnish and install, where indicated on the plans, photoelectric smoke sensors with one of the several addressable mounting base options available. The combination sensor head and twist-lock mounting base shall be UL<sup>®</sup> Listed and UL Listed as compatible with the Gamewell-FCI 600 Series or ILL95-E3 Series analog addressable fire alarm control panels. The base shall permit free interchange of sensor heads without requiring any additional wiring or additional programming of the head or base. The smoke sensor shall contain an integral LED that shall latch in when the unit goes into alarm. RF suppression techniques shall be employed to minimize false alarms. The photoelectric smoke sensor shall be the Gamewell-FCI model XP95-P.

## Specifications

<b>Standby Current:</b>	340 $\mu$ A
<b>Alarm LED Current:</b>	0.00434 A
<b>Remote Alarm Output:</b>	0.004 A @ 5 VDC
<b>Temperature Range:</b>	32°F to 140°F (0° C to 60° C)
<b>Relative Humidity:</b>	(non-condensing) 0% to 95%
<b>Recommended Spacing:</b>	Meets the 30 ft. (9.1 m) spacing guidelines in NFPA 72 Chapter 2. However, this spacing is based on ideal conditions and is to be used as a layout guide only. Appropriate installation-specific engineering is required.

## Ordering Information

Part Number	Description
<b>XP95-P</b>	Photoelectric sensor, analog addressable (55000-650)
<b>XP95-B4</b>	4.0" (10.16 cm) mounting base with XPert addressing card (45681-2101)
<b>XP95-B6R4</b>	6.0" (15.24 cm) relay base (four-wire) with XPert addressing card
<b>XP95-B6SNDR</b>	6.0" (15.24 cm) mounting base with XPert addressing card and audible alarm sounder in the base
<b>GW71112</b>	Additional blank XPert addressing cards
<b>GW30203</b>	Remote LED (24 V) on single gang plate

### GAMEWELL-FCI