FH-MI/FH-MC Series Fortified Camera System

HIGH HUMIDITY

Product Features

- Integrated Camera System including Enclosure, Lens, Camera, and Power Supply; all FH Series Camera Systems are Wired, Tested, and Certified
- Temperature Range from -20° to 45°C (-4° to 113°F)
- · Active Dehumidifier
- IK10 Mechanical Impact Resistance
- Analog and IP Camera Models with Three Lens Options
- Input Voltage 24 VAC
- Optional Fiber Optic Media Converter for IP Camera Models



Integrated Camera System

The active on-board dehumidifier of the FH-MI/FH-MC Series Fortified Camera System protects the camera and other systemrelated electronics by removing moisture buildup from sensitive components.

The FH-MI/FH-MC Series is IP66 rated with an active dehumidifier, and is dust- and water-tight. The enclosures house one of several camera options including analog NTSC or PAL models. IP cameras include 1, 2, 3, and 5 megapixel (MPx) models. The FH-MI/FH-MC **Series** is ideal for installations in high humidity environments.

Single Part Number

The FH-MI/FH-MC Series is a complete camera, lens, enclosure, power supply, and optional fiber optic media converter system. All FH Series Camera Systems are prewired and ready for immediate installation.

Active Dehumidifier

The FH-MI/FH-MC Series contains an active dehumidifier system that operates to remove moisture from the internal camera chamber. This active system allows the camera to operate with continuous humid weather conditions.

Optional Fiber Media Converter

Pelco IP camera systems can be configured with an optional fiber optic media converter. The fiber media converter uses FSFP technology to give the installer the choice of many fiber media formats from single mode to multimode.





SYSTEM COMPONENTS

C20-DW Series Analog Day/Night WDR Camera

- · Wide Dynamic Range
- 650 TV Lines
- High Sensitivity
- Day/Night with Automatic or Manual Control
- 1/3-Inch Format CCD Imager
- Autosensing DC Drive Auto Iris
- Automatic/Manual White Balance Settings for Difficult Lighting Situations
- Selectable Automatic Gain Control
- Advanced Backlight Compensation
- 3D Digital Noise Reduction (DNR)
- Privacy Zones
- Motion Detection
- · Camera Titles

Sarix® IXE10LW Series IP Cameras with SureVision

- Up to 1.2 Megapixel (MPx) Resolution (1280 x 960)
- Up to 30 Images per Second (ips) at 1280 x 960
- Auto Back Focus
- H.264 and MJPEG Compression Capability
 Day/Night Models with Mechanical IR Cut Filter
- Wide Dynamic Range with Anti-Bloom Technology
- Power over Ethernet (IEEE 802.3af) or 24 VAC
- · Ability to Control and Monitor Video Over IPv4 and IPv6 Networks
- Built-In Analytics
- Local Storage (Micro SD) for Alarm Capture

Sarix® IXE20 Series IP Cameras

- Up to 2.1 Megapixel Resolution (1920 x 1080)
- Up to 30 Images per Second (ips) at 1920 x 1080
- Auto Back Focus
- · H.264 and MJPEG Compression Capability
- Sensitivity Down to 0.03 Lux
- Ability to Control and Monitor Video Over IPv4 and IPv6 Networks
- Built-in Analytics
- Local Storage (Micro SD) for Alarm Capture
- · Adaptive Motion Detection

Sarix® IXE Series IP Cameras Series

- Up to 3.1 Megapixel Resolution (2048 x 1536)
- Up to 30 Images per Second (ips) at 1280 x 720
- Auto Back Focus
- H.264 and MJPEG Compression Capability
 Electronic PTZ Through the Web Browser
- Ability to Control and Monitor Video Over IPv4 and IPv6 Networks
- Day/Night Models
- Local Storage (Micro SD) for Alarm Capture
- · Adaptive Motion Detection





(LENS NOT SUPPLIED WITH CAMERA)





(LENS NOT SUPPLIED WITH CAMERA)

TECHNICAL SPECIFICATIONS

Sarix® IXP Series Indoor Box Cameras

- Up to 5 Megapixel Resolution (2592 x 1944)
- Up to 30 Images per Second (ips) at 1080p
- Multiple CS-Mount Lens Options
- Accessible Edge Storage with Micro SD Card
 Motion Detection and Camera Sabotage Detection
- Power over Ethernet (PoE) and 24 VAC Power Input
- Compatible with Pelco and Third-Party Video Systems
- ONVIF Profile S Conformant



- 1/3-Inch Format, Auto Iris (Direct Drive), IR Corrected
- Designed for All Day/Night and Monochrome Cameras
- Increased Sharpness in Monochrome Mode
- Focuses IR and Visible Light
- Eliminates the Problem of IR Focus Shift
- Auto Iris, Manual Focus, and Zoom



- For use with 1/3-Inch Cameras, up to 5 MPx
- Auto Iris, Manual Focus, and Zoom
- High Resolution Power in a Compact Body

FMCI-PF1M Series Media Converters

- 10/100 Mbps Ethernet
 - 10Base-T/100Base-TX Electrical Port
 - 100Base-FX Optical Port
- Optical Port Supports 100 Mbps Full-Duplex Data
- Supports Distances up to 80 km (49.7 mi) Using Interchangeable Small Form-Factor Pluggable (FSFP) Modules for Specific Fiber Type, Distance, and Connector (Must Be Ordered Separately)
- Designed to Meet NEMA TS 1/TS 2 and Caltrans Traffic Signal Control **Equipment Environmental Standards**

FSFP Series Transceivers

- Interchangeable FSFP Transceivers to Match Media Type, Fiber Count, Fiber Path Length, and Connector Type
- No Performance Adjustments Required
- Multi-Source Agreement (MSA) Compliant
- Compliant with IEEE 802.3 Standards



(LENS NOT SUPPLIED WITH CAMERA)



13VDIR3-8.5



13M15-50





SYSTEM MODEL NUMBERS

IP Camera Systems

FH-MI Series	Camera	Lens	Description
FH-MI10LW-6	IXE-10LW	13M2.2-6	High-humidity enclosure with 1.2 MP IXE-10LW IP camera
FH-MI10LW-12		13M2.8-12	
FH-MI10LW-50		13M15-50	
FH-MI20DN-6	IXE-20DN	13M2.2-6	High-humidity enclosure with 2 MP IXE-20DN IP camera
FH-MI20DN-12		13M2.8-12	
FH-MI20DN-50		13M15-50	
FH-MIXE21-6	IXE21	13M2.2-6	High-humidity enclosure with 2 MP, low-light, WDR IXE21 IP camera
FH-MIXE21-12		13M2.8-12	
FH-MIXE21-50		13M15-50	
FH-MIXE31-6	IXE31	13M2.2-6	High-humidity enclosure with 3 MP, day/night IXE31 IP camera
FH-MIXE31-12		13M2.8-12	
FH-MIXE31-50		13M15-50	
FH-MIXP31-6	IXP31	13M2.2-6	High-humidity enclosure with 3 MP, low-light, WDR IXP31 IP camera
FH-MIXP31-12		13M2.8-12	
FH-MIXP31-50		13M15-50	
FH-MIXP51-6	IXP51	13M2.2-6	High-humidity enclosure with 5 MP, day/night IXP51 IP camera
FH-MIXP51-12		13M2.8-12	
FH-MIXP51-50		13M15-50	

IP Camera Systems with FMCI-PF1 Media Converter

Requires FSFP module, sold separately.

FH-MI Series	Camera	Lens	Description
FH-MI10LW-6-F		13M2.2-6	High-humidity,
FH-MI10LW-12-F	IXE-10LW	13M2.8-12	fiber-ready enclosure with 1.2 MP IXE-10LW
FH-MI10LW-50-F		13M15-50	IP camera
FH-MI20DN-6-F		13M2.2-6	High-humidity,
FH-MI20DN-12-F	IXE-20DN	13M2.8-12	fiber-ready enclosure with 2 MP IXE-20DN IP
FH-MI20DN-50-F		13M15-50	camera
FH-MIXE21-6-F		13M2.2-6	High-humidity,
FH-MIXE21-12-F	IXE21	13M2.8-12	fiber-ready enclosure with 2 MP, low-light,
FH-MIXE21-50-F		13M15-50	WDR IXE21 IP camera
FH-MIXE31-6-F	IXE31	13M2.2-6	High-humidity, fiber-ready enclosure with 3 MP, day/night IXE31 IP camera
FH-MIXE31-12-F		13M2.8-12	
FH-MIXE31-50-F		13M15-50	
FH-MIXP31-6-F		13M2.2-6	High-humidity,
FH-MIXP31-12-F	IXP31	13M2.8-12	fiber-ready enclosure with 3 MP, low-light,
FH-MIXP31-50-F		13M15-50	WDR IXP31 IP camera
FH-MIXP51-6-F		13M2.2-6	High-humidity,
FH-MIXP51-12-F	IXP51	13M2.8-12	fiber-ready enclosure with 5 MP, day/night
FH-MIXP51-50-F		13M15-50	IXP51 IP camera

Analog Camera Systems

FH-MC Series	Camera	Lens	Description
FH-MC20-8	C20-DW-6	13VDIR3-8.5	High-humidity enclosure with C20-DW NTSC camera
FH-MC20-12		13VDIR2.8-11	
FH-MC20-50		13VDIR7.5-50	
FH-MC20X-8	C20-DW-6X	13VDIR3-8.5	High-humidity enclosure with C20-DW PAL camera
FH-MC20X-12		13VDIR2.8-11	
FH-MC20X-50		13VDIR7.5-50	

GENERAL

Construction

Enclosure High-grade thermoplastic
Mounting Arm Die-cast aluminum
Window High optic Lexan™

Finish White; powder coated wall arm and knuckle

Environment Outdoor

Operating Temperature -20° to 45° C (-4° to 113° F) Storage Temperature -10° to 60° C (14° to 140° F)

Humidity

Working and Storage 10% to 95% RH (noncondensing)
Dimensions 64.11 x 19.21 x 39.12 cm

(25.24" D x 7.56" W x 15.40" H)

Weight

Unit 7.0 kg (15.4 lb) Shipping 9.3 kg (20.4 lb)

MECHANICAL

Latching 6 captivated, Phillips head screws

Window Face Plate 6 Phillips head screws
Active Dehumidifier Thermostatically controlled

ELECTRICAL

Connections RJ-45, fiber, or coaxial Input Voltage 21.6 to 26.4 VAC Power Consumption 1.5 A at 24 VAC

RECOMMENDED POWER SUPPLY

WCS Series 24 VAC outdoor power supply, single or

multiple output

RECOMMENDED MOUNTS

Corner ECM100 - Corner mount adapter
Pipe/Pole EPM - Medium duty mount for pipe/pole

applications

CERTIFICATIONS/RATING

- CE, Class A
- UL/cUL listed
- IK10 mechanical impact resistance
- Meets NEMA Type 4X and IP66 standards (Enclosure and data connection compartment of wall arm)
- Meets NEMA Type 3R and IP54 standards (Power connection area in wall arm)