

FH-HI/FH-HC Series Fortified Camera System

HIGH TEMPERATURE

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 -10° to 70°C (14° to 158°F)
- Active Cooling System
- Excessive Temperature Warning
- IK10 Mechanical Impact Resistance
- Analog and IP Camera Models with Three Lens Options
- Input Voltage from 100 to 240 VAC
- Optional Fiber Optic Media Converter for IP Camera Models



Integrated Camera System

The active on-board air conditioning system of the **FH-HI/FH-HC Series Fortified Camera System** protects the camera and other system-related electronics from heat buildup on sensitive components.

The **FH-HI/FH-HC Series** is IP66 rated with active cooling technology 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-HI/FH-HC Series** is ideal for installations in high temperature environments.

Single Part Number

The **FH-HI/FH-HC 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 Cooler

The **FH-HI/FH-HC Series** contains an active cooling system that operates as a refrigerator to remove heat from the internal camera chamber. This active system allows the camera to operate with continuous external temperatures up to 70°C (158°F).

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.

Overtemp Alarm

The **FH-HI/FH-HC Series** provides an overtemp alarm that can be integrated into screen displays (analog versions) or into Pelco Endura and Digital Sentry VMS platforms. In addition, an API exists for the overlay alarm to be integrated into other systems.



by Schneider Electric

International Standards
Organization Registered Firm;
ISO 9001 Quality System



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TECHNICAL SPECIFICATIONS

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



(LENS NOT SUPPLIED WITH CAMERA)

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



(LENS NOT SUPPLIED WITH CAMERA)

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



(LENS NOT SUPPLIED WITH CAMERA)

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)

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



(LENS NOT SUPPLIED WITH CAMERA)

13VDIR Series Day/Night Lens

- 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



13VDIR3-8.5

13M Series Megapixel Varifocal Lens

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



13M15-50

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



FSFP-EFMM2LC2

TECHNICAL SPECIFICATIONS

SYSTEM MODEL NUMBERS

IP Camera Systems

FH-HI Series	Camera	Lens	Description
FH-HI10LW-6	IXE-10LW	13M2.2-6	High-temperature enclosure with 1.2 MP IXE-10LW IP camera
FH-HI10LW-12		13M2.8-12	
FH-HI10LW-50		13M15-50	
FH-HI20DN-6	IXE-20DN	13M2.2-6	High-temperature enclosure with 2 MP IXE-20DN IP camera
FH-HI20DN-12		13M2.8-12	
FH-HI20DN-50		13M15-50	
FH-HIXE21-6	IXE21	13M2.2-6	High-temperature enclosure with 2 MP, low-light, WDR IXE21 IP camera
FH-HIXE21-12		13M2.8-12	
FH-HIXE21-50		13M15-50	
FH-HIXE31-6	IXE31	13M2.2-6	High-temperature enclosure with 3 MP, day/night IXE31 IP camera
FH-HIXE31-12		13M2.8-12	
FH-HIXE31-50		13M15-50	
FH-HIXP31-6	IXP31	13M2.2-6	High-temperature enclosure with 3 MP, low-light, WDR IXP31 IP camera
FH-HIXP31-12		13M2.8-12	
FH-HIXP31-50		13M15-50	
FH-HIXP51-6	IXP51	13M2.2-6	High-temperature enclosure with 5 MP, day/night IXP51 IP camera
FH-HIXP51-12		13M2.8-12	
FH-HIXP51-50		13M15-50	

IP Camera Systems with FMCI-PF1 Media Converter

Requires FSFP module, sold separately.

FH-HI Series	Camera	Lens	Description
FH-HI10LW-6-F	IXE-10LW	13M2.2-6	High-temperature, fiber-ready enclosure with 1.2 MP IXE-10LW IP camera
FH-HI10LW-12-F		13M2.8-12	
FH-HI10LW-50-F		13M15-50	
FH-HI20DN-6-F	IXE-20DN	13M2.2-6	High-temperature, fiber-ready enclosure with 2 MP IXE-20DN IP camera
FH-HI20DN-12-F		13M2.8-12	
FH-HI20DN-50-F		13M15-50	
FH-HIXE21-6-F	IXE21	13M2.2-6	High-temperature, fiber-ready enclosure with 2 MP, low-light, WDR IXE21 IP camera
FH-HIXE21-12-F		13M2.8-12	
FH-HIXE21-50-F		13M15-50	
FH-HIXE31-6-F	IXE31	13M2.2-6	High-temperature, fiber-ready enclosure with 3 MP, day/night IXE31 IP camera
FH-HIXE31-12-F		13M2.8-12	
FH-HIXE31-50-F		13M15-50	
FH-HIXP31-6-F	IXP31	13M2.2-6	High-temperature, fiber-ready enclosure with 3 MP, low-light, WDR IXP31 IP camera
FH-HIXP31-12-F		13M2.8-12	
FH-HIXP31-50-F		13M15-50	
FH-HIXP51-6-F	IXP51	13M2.2-6	High-temperature, fiber-ready enclosure with 5 MP, day/night IXP51 IP camera
FH-HIXP51-12-F		13M2.8-12	
FH-HIXP51-50-F		13M15-50	

Analog Camera Systems

FH-HC Series	Camera	Lens	Description
FH-HC20-8	C20-DW-6	13VDIR3-8.5	High-temperature enclosure with C20-DW NTSC camera
FH-HC20-12		13VDIR2.8-11	
FH-HC20-50		13VDIR7.5-50	
FH-HC20X-8	C20-DW-6X	13VDIR3-8.5	High-temperature enclosure with C20-DW PAL camera
FH-HC20X-12		13VDIR2.8-11	
FH-HC20X-50		13VDIR7.5-50	

GENERAL

Construction

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

Aluminum and polycarbonate

Finish White; powder coated wall arm and knuckle

Environment Outdoor

Operating Temperature -10° to 70°C (14° to 158°F)

Storage Temperature -10° to 60°C (14° to 140°F)

Dimensions 64.11 x 19.21 x 39.12 cm
(25.24" D x 7.56" W x 15.40" H)

Weight

Unit	8.80 kg (19.4 lb)
Shipping	11.07 kg (24.4 lb)

MECHANICAL

Latching	6 captivated, Phillips head screws
Window Face Plate	6 Phillips head screws

ELECTRICAL

Connections	RJ-45, fiber, or coaxial
Input Power	100 to 240 VAC nominal
Power Consumption	1.7 A maximum at 100 to 240 VAC
Active Cooler	Thermostatically controlled

RECOMMENDED MOUNTS

Corner

ECM100	Corner mount adapter
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Pipe/Pole

EPM	Medium duty mount for pipe/pole applications
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CERTIFICATIONS/RATINGS

- 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)

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