

# FH-SI/FH-SC Series Fortified Camera System

## 12 VDC-POWERED FOR SOLAR APPLICATIONS

### Product Features

- Integrated Camera System including Enclosure, Lens, and Camera; all FH Series Cameras are Wired, Tested, and Certified
- Temperature Range from  $-20^{\circ}$  to  $45^{\circ}\text{C}$  ( $-4^{\circ}$  to  $113^{\circ}\text{F}$ )
- Heating and Cooling System
- IK10 Mechanical Impact Resistance
- Analog and IP Camera Models with Three Lens Options
- Input Power 12 VDC
- Optional Fiber Optic Media Converter for IP Camera Models



### Integrated Camera System

The **FH-SI/FH-SC Series Fortified Camera System** is designed with a unique power supply to power the camera and other system-related electronics using a low voltage input.

The **FH-SI/FH-SC Series** is IP66 rated with a specialized power supply 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-SI/FH-SC Series** is ideal for installations with power constraints, including those installations using solar power.

### Single Part Number

The **FH-SI/FH-SC 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.

### 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.



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-SI Series	Camera	Lens	Description
FH-SI10LW-6	IXE-10LW	13M2.2-6	Solar enclosure with 1.2 MP IXE-10LW IP camera
FH-SI10LW-12		13M2.8-12	
FH-SI10LW-50		13M15-50	
FH-SI20DN-6	IXE-20DN	13M2.2-6	Solar enclosure with 2 MP IXE-20DN IP camera
FH-SI20DN-12		13M2.8-12	
FH-SI20DN-50		13M15-50	
FH-SIXE21-6	IXE21	13M2.2-6	Solar enclosure with 2 MP, low-light, WDR IXE21 IP camera
FH-SIXE21-12		13M2.8-12	
FH-SIXE21-50		13M15-50	
FH-SIXE31-6	IXE31	13M2.2-6	Solar enclosure with 3 MP, day/night IXE31 IP camera
FH-SIXE31-12		13M2.8-12	
FH-SIXE31-50		13M15-50	
FH-SIXP31-6	IXP31	13M2.2-6	Solar enclosure with 3 MP, low-light, WDR IXP31 IP camera
FH-SIXP31-12		13M2.8-12	
FH-SIXP31-50		13M15-50	
FH-SIXP51-6	IXP51	13M2.2-6	Solar enclosure with 5 MP, day/night IXP51 IP camera
FH-SIXP51-12		13M2.8-12	
FH-SIXP51-50		13M15-50	

### IP Camera Systems with FMCI-PF1 Media Converter

Requires FSFP module, sold separately.

FH-SI Series	Camera	Lens	Description
FH-SI10LW-6-F	IXE-10LW	13M2.2-6	Solar, fiber-ready enclosure with 1.2 MP IXE-10LW IP camera
FH-SI10LW-12-F		13M2.8-12	
FH-SI10LW-50-F		13M15-50	
FH-SI20DN-6-F	IXE-20DN	13M2.2-6	Solar, fiber-ready enclosure with 2 MP IXE-20DN IP camera
FH-SI20DN-12-F		13M2.8-12	
FH-SI20DN-50-F		13M15-50	
FH-SIXE21-6-F	IXE21	13M2.2-6	Solar, fiber-ready enclosure with 2 MP, low-light, WDR IXE21 IP camera
FH-SIXE21-12-F		13M2.8-12	
FH-SIXE21-50-F		13M15-50	
FH-SIXE31-6-F	IXE31	13M2.2-6	Solar, fiber-ready enclosure with 3 MP, day/night IXE31 IP camera
FH-SIXE31-12-F		13M2.8-12	
FH-SIXE31-50-F		13M15-50	
FH-SIXP31-6-F	IXP31	13M2.2-6	Solar, fiber-ready enclosure with 3 MP, low-light, WDR IXP31 IP camera
FH-SIXP31-12-F		13M2.8-12	
FH-SIXP31-50-F		13M15-50	
FH-SIXP51-6-F	IXP51	13M2.2-6	Solar, fiber-ready enclosure with 5 MP, day/night IXP51 IP camera
FH-SIXP51-12-F		13M2.8-12	
FH-SIXP51-50-F		13M15-50	

### Analog Camera Systems

FH-SC Series	Camera	Lens	Description
FH-SC20-8	C20-DW-6	13VDIR3-8.5	Solar enclosure with C20-DW NTSC camera
FH-SC20-12		13VDIR2.8-11	
FH-SC20-50		13VDIR7.5-50	
FH-SC20X-8	C20-DW-6X	13VDIR3-8.5	Solar enclosure with C20-DW PAL camera
FH-SC20X-12		13VDIR2.8-11	
FH-SC20X-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)
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

## ELECTRICAL

Connections	RJ-45, fiber, or coaxial
Input Power	12 VDC ± 5%
Power Consumption	1.2 A at 12 VDC

## 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/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)

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