

FD5 Series Environmental Outdoor Fixed Dome

1/3-INCH CCD, 650 TVL, RUGGED, HIGH RESOLUTION, DAY/NIGHT, IR OPTION

Product Features

- 650 TV Lines
- 0.1 Lux Sensitivity (No IR), Zero Lux (with IR)
- Sony® 1/3-Inch EXview HAD CCD II™ Imager
- Digital Signal Processing (DSP)
- 3 Camera Options:
 - Infrared (IR) Illumination Day/Night High Resolution
 - True Day/Night High Resolution
 - Color High Resolution
- IR Compensation (IR Models Only)
- Varifocal Lens
- Autosensing Power (24 VAC/12 VDC with Internal Synchronization)
- Rugged, Vandal-Resistant Design (IK10)
- Environmental Capability with a Wide Operating Temperature

The **FD5 Series** is Pelco's general purpose environmental and rugged dome camera. It is designed to provide superior picture quality over a wide range of conditions. The camera's attractive size, combined with its numerous features, makes it the ideal camera for most outdoor applications.

The **FD5 Series** dome camera integrates a camera and lens package into a small, versatile outdoor enclosure that can be mounted directly to a ceiling or wall. The **FD5 Series** features a 3-axis camera and lens positioning system that is capable of a wide variety of pan and tilt angles.

The **FD5 Series** offers three high resolution camera options suitable for a variety of indoor environments:

- **IR Illumination High Resolution Dome:** Features a high resolution (650 TVL) color camera with auto iris, and varifocal lens. The IR camera option is equipped with high performance IR compensation. This camera can be set manually to adjust IR illumination levels, enabling customers to change the levels of luminance and contrast according to the shooting environment. This function reduces the blooming effect and delivers clear images when objects get closer to the camera. The IR camera option uses a group of IR LEDs for supplemental lighting. This allows the camera to function under zero lux illumination when IR is on, creating an effective IR illumination distance up to 25 meters. Application examples include outdoor environments with difficult lighting conditions that need a supplemental IR light source.



FD5-DV SERIES

- Weathertight Outdoor Operation (IP66)
- Alarm Output (Based on Model)
- Shipped Completely Assembled, Easy to Install

- **True Day/Night High Resolution Dome:** Features a high resolution (650 TVL) day/night camera with auto iris and varifocal lens. The camera uses a movable IR cut filter to switch between color and black-white (B-W) modes in changing environmental lighting conditions and when the need for low-light sensitivity is realized. Application examples include outdoor environments that require color images during the day but use monochrome images at night.
- **Color High Resolution Dome:** Features a high resolution (650 TVL) color camera with auto iris, and varifocal lens. This camera is suitable for general outdoor applications in most fixed lighting conditions. Its full features insure that images are clear and crisp at all times under consistent light

All **FD5 Series** cameras feature ATR technology, which can provide dynamic range by selecting different gamma levels.

The **FD5 Series** has built-in analytical capabilities such as privacy zones, motion detection, and camera titles that adds to its functionality and makes it suitable for most applications.

The **FD5 Series** has a rugged, vandal-resistance design and an impact resistance that meets the IK10 standard. The **FD5 Series** has a wide operating temperature (-30° to 50°C), which makes it an ideal solution for most rugged outdoor applications. The **FD5 Series** also meets weathertight IP66 standards.

The **FD5 Series** is shipped completely assembled, making installation fast and easy. To surface-mount the unit, remove it from the box, remove the lower dome, attach it to the mounting surface, and connect video and power.

TECHNICAL SPECIFICATIONS

CAMERA/OPTICS

	FD5-V Series Varifocal Lens Models	FD5-DV Series True Day/Night Varifocal Lens Models	FD5-IRV Series IR Illumination Varifocal Lens Models
Image Sensor	Sony 1/3-Inch EXview HAD CCD II™ 960H	Sony 1/3-Inch EXview HAD CCD II 960H	Sony 1/3-Inch EXview HAD CCD II 960H
Signal Processing	Sony DSP, Effio-E™	Sony DSP, Effio-E	Sony DSP, Effio-E
Effective Pixels NTSC PAL	976 (H) x 494 (V) 976 (H) x 582 (V)	976 (H) x 494 (V) 976 (H) x 582 (V)	976 (H) x 494 (V) 976 (H) x 582 (V)
Scanning Area	5.58 (H) mm x 4.67 (V) mm (0.22 x 0.18 inch)	5.58 (H) mm x 4.67 (V) mm (0.22 x 0.18 inch)	5.58 (H) mm x 4.67 (V) mm (0.22 x 0.18 inch)
Scanning System NTSC PAL	525 lines, 2:1 interlace 625 lines, 2:1 interlace	525 lines, 2:1 interlace 625 lines, 2:1 interlace	525 lines, 2:1 interlace 625 lines, 2:1 interlace
Scanning Frequency NTSC PAL	Horizontal, 15.734 kHz Vertical, 59.94 Hz Horizontal, 15.625 kHz Vertical, 50.00 Hz	Horizontal, 15.734 kHz Vertical, 59.94 Hz Horizontal, 15.625 kHz Vertical, 50.00 Hz	Horizontal, 15.734 kHz Vertical, 59.94 Hz Horizontal, 15.625 kHz Vertical, 50.00 Hz
Synchronization	Internal	Internal	Internal
Horizontal Resolution	650 TVL	650 TVL	650 TVL
Minimum Illumination	f/1.2; 2,850°K; 30 IRE Color 0.1 lux Mono 0.1 lux	f/1.2; 2,850°K; 30 IRE Color 0.1 lux Mono 0.05 lux	f/1.2; 2,850°K; 30 IRE Color 0.1 lux Mono 0.0 lux
IR Cut Filter	Fixed	Yes, D/N switch	Yes, D/N switch
Dynamic Range	Gamma selectable (ATR)	Gamma selectable (ATR)	Gamma selectable (ATR)
IR Illumination Distance	—	—	25 m
IR Sensitivity	—	—	>40% at 850 nm, peak response
Low Light Technology	—	ICR	ICR and LEDs
Electronic Shutter Range	1/50 ~ 1/10,000 sec	1/50 ~ 1/10,000 sec	1/50 ~ 1/10,000 sec
Video Output	1.0 Vp-p, NTSC/PAL composite, 75 ohms, BNC connector	1.0 Vp-p, NTSC/PAL composite, 75 ohms, BNC connector	1.0 Vp-p, NTSC/PAL composite, 75 ohms, BNC connector
White Balance	ATW/Manual/Push/Push Lock/User1/User2/Anti CR	ATW/Manual/Push/Push Lock/User1/User3/Anti CR	ATW/Manual/Push/Push Lock/User1/User4/Anti CR
Signal-to-Noise Ratio	48 dB (>52 dB by parameter adjustment)	48 dB (>52 dB by parameter adjustment)	48 dB (>52 dB by parameter adjustment)
Lens	Varifocal	Varifocal	Varifocal
F-Number	f/1.2	f/1.2	f/1.2
Focal Length	3.0 to 9.0 mm	2.8 to 10.5 mm	2.8 to 10.5 mm
Focus Range	∞ to 0.5 m (1.6 ft)	∞ to 0.3 m (1 ft)	∞ to 0.3 m (1 ft)
Horizontal Angle of View	85.3° at 3.0 mm wide zoom; 31.5° at 9.0 mm telephoto zoom	101.8° at 2.8 mm wide zoom; 27.4° at 10.5 mm telephoto zoom	101.8° at 2.8 mm wide zoom; 27.4° at 10.5 mm telephoto zoom
Vertical Angle of View	63.8° at 3.0 mm wide zoom; 23.7° at 9.0 mm telephoto zoom	73.7° at 2.8 mm wide zoom; 20.6° at 10.5 mm telephoto zoom	73.7° at 2.8 mm wide zoom; 20.6° at 10.5 mm telephoto zoom
Adjusting Angle Panning Range Tilting Range Rotation Range	±180° +90° to 0° ±180°	±180° +90° to 0° ±180°	±180° +55° to 0° ±180°
Noise Reduction	2D	2D	2D
Motion Detection	Included (4 areas)	Included (4 areas)	Included (4 areas)
Privacy Zones	Included (8 zones)	Included (8 zones)	Included (8 zones)
Camera Titles	—	Included	Included
Alarm Out	—	1	1

TECHNICAL SPECIFICATIONS

GENERAL

Back Box Construction	ABS plastic	
Bubble Type	Lightly obscured	
Weight	Unit	Shipping
FD5-V Series	0.73 kg (1.61 lb)	1.28 kg (2.82 lb)
FD5-DV Series	0.73 kg (1.61 lb)	1.28 kg (2.82 lb)
FD5-IRV Series	0.75 kg (1.65 lb)	1.28 kg (2.82 lb)

ELECTRICAL


Power Requirement	
NTSC	12 VDC/24 VAC +10% to -15%, 60 Hz
PAL	12 VDC/24 VAC +10% to -15%, 50 Hz
Power Consumption	
FD5-V Series	2.5 W (without heater); 43 W (with heater on)
FD5-DV Series	2.5 W (without heater); 43 W (with heater on)
FD5-IRV Series	4 W (IR on, without heater); 47 W (IR on, with heater on)
Power Connector	2-pin terminal block with screw terminals
Video Connector	BNC

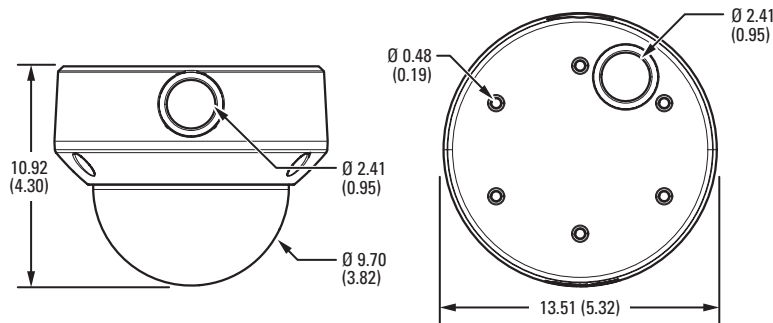
ENVIRONMENTAL

Operating Temperature	-30° to 50°C (-22° to 122°F)
Storage Temperature	-30° to 60°C (-22° to 140°F)
Operating Humidity	20% to 80%, noncondensing
Storage Humidity	20% to 90%, noncondensing
Impact Resistance	IK10

CERTIFICATIONS

- CE, Class B
- FCC, Class B
- UL/cUL Listed
- Meets IP66 standards

 NOTE: VALUES IN PARENTHESES ARE INCHES;
ALL OTHERS ARE CENTIMETERS.



TECHNICAL SPECIFICATIONS

MODELS

Camera Type	Lens Type	NTSC	PAL
Color, High Resolution	Varifocal, 3.0 to 9.0 mm	FD5-V9-6	FD5-V9-6X
True Day/Night, ICR Switch	Varifocal, 2.8 to 10.5 mm	FD5-DV10-6	FD5-DV10-6X
IR Illumination	Varifocal, 2.8 to 10.5 mm	FD5-IRV10-6	FD5-IRV10-6X

RECOMMENDED POWER SUPPLIES

TF9000	Power supply for one 24 VAC camera, 50 VA
MCS Series	Multiple 24 VAC camera power supply, indoor

OPTIONAL ACCESSORIES

FD-SC	Dome camera service cable to BNC, 1 meter (3.3 ft), 2-pin
TW3001PC	Passive twisted wire transmission for use in unshielded twisted pair (UTP) installations