# **FD2 Series Indoor Fixed Dome**

## 18 TO 32 VAC (REVISION A), 1/3-INCH CCD, 650 TVL, WDR, DAY/NIGHT, IR OPTIONS

### **Product Features**

- 650 TV Lines
- 0.1 Lux Sensitivity (No IR), Zero Lux (with IR)
- Sony® 1/3-Inch Super HAD CCD II™ 960H Imager or Sony 1/3-Inch EXview HAD CCD II Imager (depending on model)
- Digital Signal Processing (DSP)
- 4 Camera Options:
  - Wide Dynamic Range (WDR) and Day/Night with Digital Slow Shutter (DSS) High Resolution
  - Infrared (IR) Illumination Day/Night High Resolution
  - True Day/Night High Resolution
  - Color High Resolution
- IR Compensation (IR Models Only)
- Fixed or Varifocal Lens
- Autosensing Power; 18 to 32 VAC/12 VDC with Internal Synchronization (Revision A)
- Remote Access Capability Through Coaxitron<sup>®</sup> (Based on Model)

The **FD2 Series** is Pelco's general purpose indoor fixed 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 indoor applications.

The **FD2 Series** dome camera integrates a camera and lens package into a small, versatile indoor enclosure that can be mounted directly to a ceiling or wall. The **FD2 Series** features a 3-axis camera and lens positioning system that is capable of a wide variety of pan and tilt angles.

The **FD2 Series** offers four high resolution camera options suitable for a variety of indoor environments:

- Wide Dynamic Range and Day/Night DSS Dome: Features a high resolution (650 TVL), day/night camera with an auto iris varifocal lens. This camera uses WDR sensor technology to provide 120 dB dynamic range. This technology helps capture excellent visual images even when there are extremely different illumination conditions within a surveillance area. The camera can also switch automatically from color to mono mode in a low-light environment by removing the IR cut filter, and digital slow shutter (DSS) allows for extreme low-light capability. These make this camera an ideal solution for applications with difficult and unbalanced lighting conditions that require extremely high sensitivity and dynamic range.
- IR Illumination High Resolution Dome: Features a high resolution (650 TVL) color camera with fixed or 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



FD2-IRV SERIES

- Alarm Output (Based on Model)
- Shipped Completely Assembled, Easy to Install

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 environments with difficult lighting conditions that need a supplemental IR light source.

- 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 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, electronic day/night functions, and fixed or varifocal lens. This camera is suitable for general applications in most fixed lighting conditions. Its full features ensure that images are clear and crisp at all times under consistent light.

In addition, WDR models in the FD2 fixed dome series feature WDR sensor and processing technology, ensuring the best picture quality even in challenging environments. Other models in this series features ATR technology, which can help provide dynamic range by selecting different gamma profiles.

The **FD2 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.





# **TECHNICAL SPECIFICATIONS**

## **CAMERA/OPTICS**

FD2-F Series	FD2-V Series	FD2-DV Series
		True Day/Night Varifocal Lens Models
	· ·	Sony 1/3-Inch EXview HAD CCD II
Sony DSP, ΕΠΙΟ-Ε	Sony DSP, ETTIO-E	Sony DSP, Effio-E
976 (H) v 494 (\/)	976 (H) v 494 (V)	976 (H) x 494 (V)
		976 (H) x 582 (V)
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)
525 lines, 2:1 interlace	525 lines, 2:1 interlace	525 lines, 2:1 interlace
625 lines, 2:1 interlace	625 lines, 2:1 interlace	625 lines, 2:1 interlace
		Horizontal, 15.734 kHz Vertical, 59.94 Hz
•	· · · · · · · · · · · · · · · · · · ·	Horizontal, 15.625 kHz
Vertical, 50.00 Hz	Vertical, 50.00 Hz	Vertical, 50.00 Hz
Internal	Internal	Internal
650 TVL	650 TVL	650 TVL
f/2.0; 2,850°K; 30 IRE	f/1.2; 2,850°K; 30 IRE	f/1.2; 2,850°K; 30 IRE
Color 0.1 lux	Color 0.1 lux	Color 0.1 lux
		Mono 0.05 lux
* *		Yes, D/N switch
Gamma selectable (ATR)	Gamma selectable (ATR)	Gamma selectable (ATR)
_	<u> </u>	_
_	_	_
Digital day/night	Digital day/night	ICR, digital day/night
Auto/Manual 1/60 ~ 1/10,000 sec Auto/Manual 1/50 ~ 1/10,000 sec	Auto/Manual 1/60 ~ 1/10,000 sec Auto/Manual 1/50 ~ 1/10,000 sec	Auto/Manual 1/60 ~ 1/10,000 sec Auto/Manual 1/50 ~ 1/10,000 sec
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
ATW/Manual/Push/Push Lock/User1/User2/Anti CR	ATW/Manual/Push/Push Lock/User1/User2/Anti CR	ATW/Manual/Push/Push Lock/User1/User2/Anti CR
48 dB (>52 dB by parameter adjustment)	48 dB (>52 dB by parameter adjustment)	48 dB (>52 dB by parameter adjustment)
Fixed	Varifocal	Varifocal
f/2.0	f/1.2	f/1.2
2.8 mm (FD2-F3 Series) 3.6 mm (FD2-F4 Series)	2.8 to 10.5 mm	2.8 to 10.5 mm
∞ to 1.2 m (3.9 ft)	∞ to 0.3 m (1 ft)	∞ to 0.3 m (1 ft)
90° at 2.8 mm (FD2-F3 Series) 72° at 3.6 mm (FD2-F4 Series)	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
80° at 2.8 mm (FD2-F3 Series)	73.2° at 2.8 mm wide zoom;	73.7° at 2.8 mm wide zoom;
52° at 3.6 mm (FD2-F4 Series)	20.6° at 10.5 mm telephoto zoom	20.6° at 10.5 mm telephoto zoom
		±180°
		+75° to 0° ±180°
		2D
		Included (4 areas)
		Included (8 areas)
_	1_	Included
	1_	Included
	1_	
	(0.22 x 0.18 inch)  525 lines, 2:1 interlace 625 lines, 2:1 interlace Horizontal, 15.734 kHz Vertical, 59.94 Hz Horizontal, 15.625 kHz Vertical, 50.00 Hz Internal 650 TVL  f/2.0; 2,850°K; 30 IRE Color 0.1 lux Mono 0.1 lux Fixed Gamma selectable (ATR)  —  Digital day/night  Auto/Manual 1/60 ~ 1/10,000 sec Auto/Manual 1/50 ~ 1/10,000 sec 1.0 Vp-p, NTSC/PAL composite, 75 ohms, BNC connector  ATW/Manual/Push/Push Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment) Fixed f/2.0  2.8 mm (FD2-F3 Series) 3.6 mm (FD2-F4 Series)  ∞ to 1.2 m (3.9 ft)  90° at 2.8 mm (FD2-F3 Series) 72° at 3.6 mm (FD2-F3 Series) 80° at 2.8 mm (FD2-F3 Series)	Sony   1/3-lnch Exview HAD CCD   I   Sony DSP, Effio-E

# **TECHNICAL SPECIFICATIONS**

## **CAMERA/OPTICS**

	FD2-IRV Series IR Illumination	FD2-DWV Series True Day/Night, WDR, DSS	
	Varifocal Lens Models	Varifocal Lens Models	
Image Sensor	Sony 1/3-Inch EXview HAD CCD II	Sony 1/3-Inch Super HAD CCD II 960H	
Signal Processing	Sony DSP, Effio-E	Sony DSP, Effio-P	
Effective Pixels			
NTSC	976 (H) x 494 (V)	976 (H) x 494 (V)	
PAL	976 (H) x 582 (V)	976 (H) x 582 (V)	
Scanning Area	5.58 (H) mm x 4.67 (V) mm	6.0 (H) mm x 5.0 (V) mm	
	(0.22 x 0.18 inch)	(0.24 x 0.20 inch)	
Scanning System			
NTSC	525 lines, 2:1 interlace	525 lines, 2:1 interlace	
PAL	625 lines, 2:1 interlace	625 lines, 2:1 interlace	
Scanning Frequency			
NTSC	Horizontal, 15.734 kHz	Horizontal, 15.734 kHz	
PAL	Vertical, 59.94 Hz Horizontal, 15.625 kHz	Vertical, 59.94 Hz Horizontal, 15.625 kHz	
ΓAL	Vertical, 50.00 Hz	Vertical, 50.00 Hz	
Synchronization	Internal		
		Internal	
Horizontal Resolution	650 TVL	650 TVL	
Minimum Illumination	f/1.2; 2,850°K; 30 IRE Color 0.1 lux	f/1.2; 2,850°K; 30 IRE Color (20 ms for PAL or 17 ms for NTSC) 0.13 lux	
	Mono (with IR) 0.0 lux	Color (500 ms) 0.03 lux	
	IVIONO (WITH III) O.O IUX	Mono (20 ms for PAL or 17 ms for NTSC) 0.05 lux	
		Mono (500 ms) 0.00004 lux	
IR Cut Filter	Yes, D/N switch	Yes, D/N switch	
Dynamic Range	Gamma selectable (ATR)	120 dB Dual-scan WDR	
IR Illumination Distance	25 m	—	
IR Sensitivity			
	>40% at 850 nm, peak response		
Low Light Technology	ICR and LEDs, digital day/night	ICR, DSS	
Electronic Shutter Range	Auto/Manual 1/60 ~ 1/10,000 sec Auto/Manual 1/50 ~ 1/10,000 sec	NTSC Auto, 1/60 to 1/100,000 sec; Manual, 1/60 to 1/10,000 sec	
		PAL Auto, 1/50 to 1/100,000 sec;	
		Manual, 1/50 to 1/10,000 sec	
		<b>NOTE:</b> Slow shutter support is 2X to 128X.	
Video Output	1.0 Vp-p, NTSC/PAL composite, 75 ohms,	1.0 Vp-p, NTSC/PAL composite, 75 ohms,	
	BNC connector	BNC connector	
Marie B. I	ATW/Manual/Push/Push	ATW/Manual/Push/Push	
White Balance	Al VV/IVIGITUAI/I USII/I USII	AT VV/IVIanuai/Pusn/Pusn	
White Balance	Lock/User1/User2/Anti CR	Lock/User1/User2/Anti CR	
Signal-to-Noise Ratio			
	Lock/User1/User2/Anti CR	Lock/User1/User2/Anti CR	
Signal-to-Noise Ratio	Lock/User1/User2/Anti CR 48 dB (>52 dB by parameter adjustment)	Lock/User1/User2/Anti CR 48 dB (>52 dB by parameter adjustment)	
Signal-to-Noise Ratio Lens	Lock/User1/User2/Anti CR 48 dB (>52 dB by parameter adjustment) Varifocal	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal	
Signal-to-Noise Ratio Lens F-Number Focal Length	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm	
Signal-to-Noise Ratio Lens F-Number	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  • to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  • to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range Rotation Range	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180°  +75° to 0°  ±180°	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range Rotation Range Noise Reduction	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180°  +75° to 0°  ±180°  3D	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range Rotation Range Noise Reduction Motion Detection	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180°  +60° to 0°  ±180°  2D  Included (4 areas)	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ocition to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180°  +75° to 0°  ±180°  3D  Included (4 areas)	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range Rotation Range Noise Reduction Motion Detection Privacy Zones	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180°  +60° to 0°  ±180°  2D  Included (4 areas)	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180°  +75° to 0°  ±180°  3D  Included (4 areas)  Included (15 sizeable windows)	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range Rotation Range Noise Reduction Motion Detection Privacy Zones Digital Zoom	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180° +60° to 0° ±180°  2D  Included (4 areas)  Included (8 areas)  —	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom; 27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom; 20.6° at 10.5 mm telephoto zoom  ±180° +75° to 0° ±180°  3D  Included (4 areas)  Included (15 sizeable windows)  Included, 255X (through camera menu only) Included	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range Rotation Range Noise Reduction Motion Detection Privacy Zones Digital Zoom Image Stabilization Camera Titles	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180° +60° to 0° ±180°  2D  Included (4 areas)  Included (8 areas)  —  Included	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180°  +75° to 0°  ±180°  3D  Included (4 areas)  Included (15 sizeable windows)  Included, 255X (through camera menu only)  Included  Included	
Signal-to-Noise Ratio Lens F-Number Focal Length Focus Range Horizontal Angle of View Vertical Angle of View Adjusting Angle Panning Range Tilting Range Rotation Range Noise Reduction Motion Detection Privacy Zones Digital Zoom Image Stabilization	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom;  27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom;  20.6° at 10.5 mm telephoto zoom  ±180° +60° to 0° ±180°  2D  Included (4 areas)  Included (8 areas)  —  Included	Lock/User1/User2/Anti CR  48 dB (>52 dB by parameter adjustment)  Varifocal  f/1.2  2.8 to 10.5 mm  ∞ to 0.3 m (1 ft)  101.8° at 2.8 mm wide zoom; 27.4° at 10.5 mm telephoto zoom  73.7° at 2.8 mm wide zoom; 20.6° at 10.5 mm telephoto zoom  ±180° +75° to 0° ±180°  3D  Included (4 areas)  Included (15 sizeable windows)  Included, 255X (through camera menu only) Included	

#### **MODELS**

Camera Type	Lens Type	NTSC	PAL
Color, High Resolution	Fixed, 2.8 mm	_	FD2-F3-6X
Color, High Resolution	Fixed, 3.6 mm	FD2-F4-6	FD2-F4-6X
Color, High Resolution	Varifocal, 2.8 to 10.5 mm	FD2-V10-6	FD2-V10-6X
IR Illumination	Varifocal, 2.8 to 10.5 mm	FD2-IRV10-6	FD2-IRV10-6X
True Day/Night, ICR Switch	Varifocal, 2.8 to 10.5 mm	FD2-DV10-6	FD2-DV10-6X
True Day/Night, WDR, DSS, ICR Switch	Varifocal, 2.8 to 10.5 mm	FD2-DWV10-6	FD2-DWV10-6X

#### **GENERAL**

Back Box Construction ABS plastic
Bubble Type Lightly obscured

 Weight
 Unit
 Shipping

 FD2-F, FD2-IRV
 0.30 kg (0.66 lb)
 0.60 kg (1.32 lb)

 FD2-V, FD2-DV, FD2-DWV
 0.31 kg (0.68 lb)
 0.61 kg (1.34 lb)

ELECTRICAL

Power Requirement\*

NTSC 18 to 32 VAC 60 Hz/12 VDC +10% to -15% PAL 18 to 32 VAC 50 Hz/12 VDC +10% to -15%

Power Consumption

FD2-F, FD2-V, FD2-DV 2.5 W FD2-IRV 4 W FD2-DWV 4.5 W

Power Connector 2-pin terminal block with screw terminals

Video Connector BNC

Alarm Output 2-pin terminal block with screw terminals

(available on some models)

For outdoor environmental conditions from  $-30^{\circ}$  to  $50^{\circ}$ C ( $-22^{\circ}$  to  $122^{\circ}$ F), use only an AC power supply source (18 to 32 VAC).

For indoor or outdoor applications with ambient temperatures of  $0^{\circ}$  to  $50^{\circ}$ C (32° to 122°F), use 12 VDC power, or an AC power supply source (18 to 32 VAC).

#### **ENVIRONMENTAL**

Operating Temperature -10° to 50°C (14° to 122°F)
Storage Temperature -20° to 60°C (-40° to 140°F)
Operating Humidity 20% to 80%, noncondensing
Storage Humidity 20% to 90%, noncondensing

#### **CERTIFICATIONS**

- CE, Class B
- FCC, Class B
- UL/cUL Listed

#### **RECOMMENDED POWER SUPPLIES**

TF2000 Power supply for one camera, 20 VA
MCS Series Multiple camera power supply, indoor

#### **OPTIONAL ACCESSORIES**

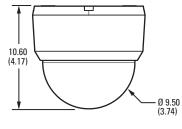
FD-SC Dome camera service cable to BNC,

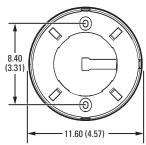
1 meter (3.3 ft), 2-pin

TW4001PC Passive twisted wire transmission for use in

unshielded twisted pair (UTP) installations

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





<sup>\*</sup>Suggested installations (Revision A):