



BOSCH
Invented for life

VDC-480 Series Dome Cameras FlexiDome XF Indoor



- ▶ Indoor polycarbonate dome
- ▶ XF-Dynamic for wide dynamic range
- ▶ NightSense
- ▶ 15-bit DSP technology
- ▶ 540 TVL color resolution
- ▶ SensUp 10 x extended sensitivity
- ▶ Bilinx bi-directional communication
- ▶ Patented dome shape for 90° vertical view

The FlexiDome^{XF} Indoor series are the ultimate solutions for virtually any indoor surveillance application. These units contain full-featured color cameras, with a 1/3-inch CCD and integral varifocal lenses.

Installation is quick and easy, since the cameras come completely assembled and ready to use. Using the proprietary pan/tilt/rotation mechanism, installers can select the exact field of view. Mounting options are numerous, including surface, 4S (USA), wall, corner, and suspended ceiling.

The VDC-480 series dome cameras are an ideal solution for many surveillance applications, especially where backlighting may be a concern. Their compact, sleek design and virtually flush-mount appearance will complement any decor.

Functions

Technology

The VDC-480 series incorporates the latest technology adopted from the high-performance Dinion^{XF} Color cameras. This technology ensures the highest possible image quality at all times and under all conditions. Based on a unique combination of 15-bit digital video processing and XF-dynamic, these cameras provide excellent

sensitivity, with up to 32 x extended dynamic range. This delivers a sharper, more detailed image with outstanding accuracy in color reproduction.

Operation

All cameras feature video motion detection, auto black, default shutter, and back light compensation for optimum performance in all lighting conditions. The lens wizard and focus aid make lens adjustment easy and straightforward, and ensure proper focus throughout the 24-hour cycle. All cameras incorporate Bilinx, a technology that allows technicians to set up, control the camera settings, and even update firmware remotely over the video cable.

Controls and Indicators

- OSD
- 5-key operation

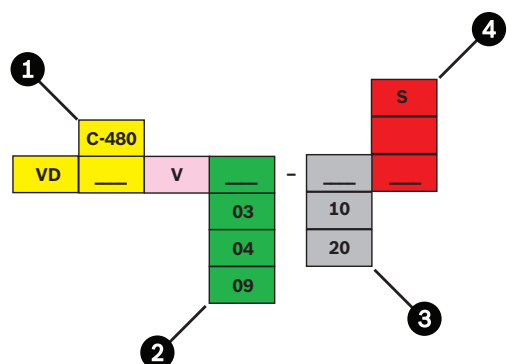
Interconnections

- Video connection BNC on flying lead
- Power connection on flying leads

Certifications and Approvals

Safety	UL 1950; CSA 22.2 No. 950; EN 60950 (CE)
Immunity	EN 50130-4 (CE)
Emission	EN 50022 class B (CE); FCC, class B part 15

Installation/Configuration Notes



1 C-480 Color (with NightSense)

2 03 3 to 9.5 mm F1.0

04 3.7 to 12 mm F1.6

09 9 to 22 mm F1.4

3 10 PAL color or CCIR mono

20 NTSC color or EIA mono

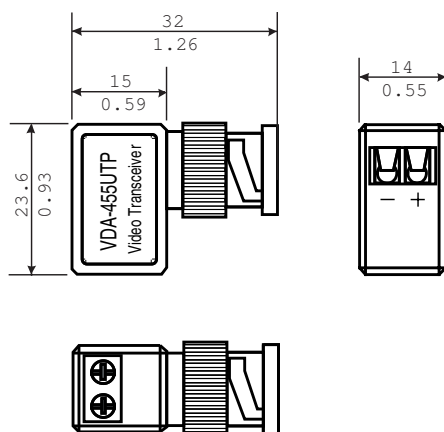
4 Flush mount

S Surface mount

Model overview

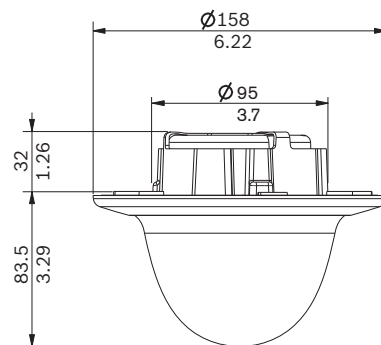
Model	Standard	Lens
VDC-480V03-10	PAL	3 to 9.5 mm F1.0
VDC-480V03-20	NTSC	3 to 9.5 mm F1.0
VDC-480V04-10	PAL	3.7 to 12 mm F1.6
VDC-480V04-20	NTSC	3.7 to 12 mm F1.6
VDC-480V09-10	PAL	9 to 22 mm F1.4
VDC-480V09-20	NTSC	9 to 22 mm F1.4

BNC to UTP Transceiver



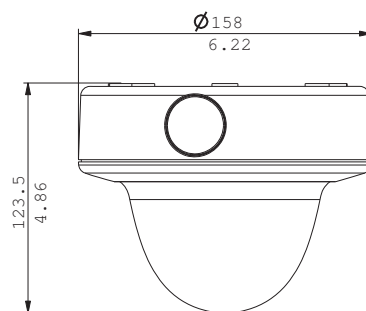
mm (in)

Indoor Flush Mounting

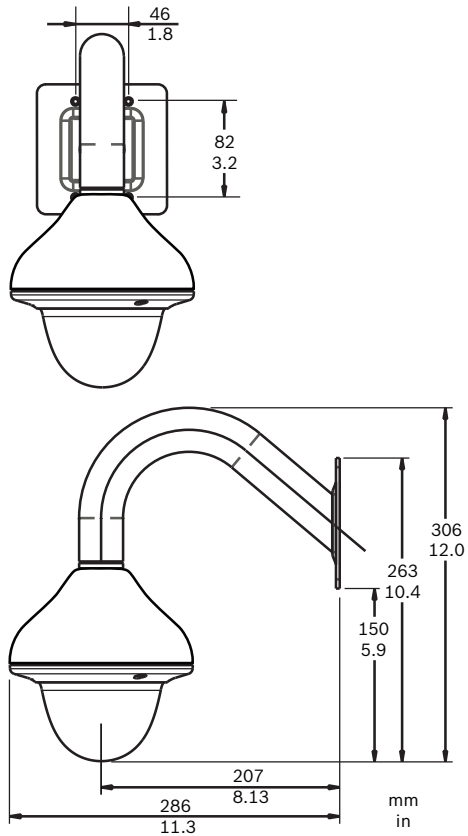
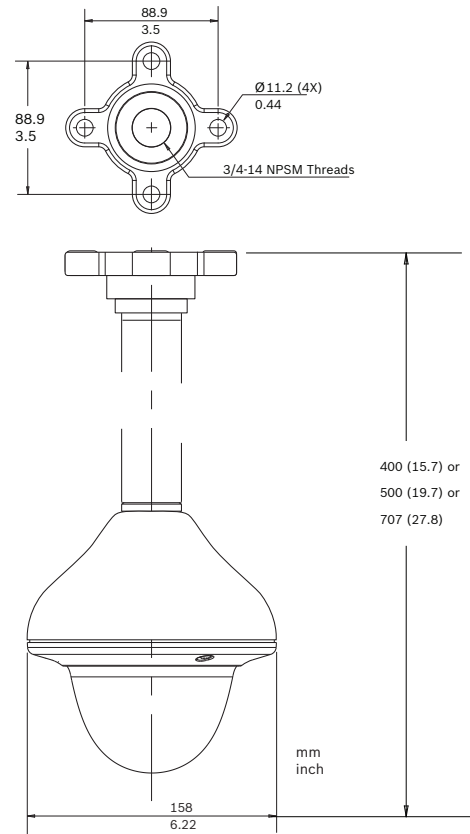
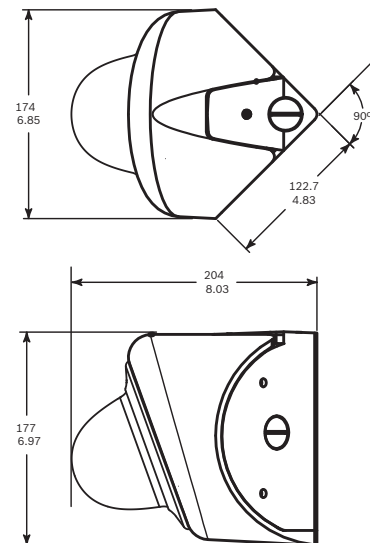


mm (in)

VDA-445SMB-Surface Mount Box



mm (in)

VDA-445WMT-Pendant Wall Mount**VDA-455PMT-Pendant Pipe Mount****VDA-455CMT-Corner Mount**

mm (in.)

Technical Specifications

Electrical

Power supply

Rated voltage	12 VDC or 24 VAC, 50/60 Hz
Voltage range	10.8 to 39 VDC or 12 to 28 VAC, 45 to 65 Hz
Power consumption	4 W
Imager	Interline transfer CCD, 1/3-inch image format
Active picture elements	
PAL models	752 H x 582 V
NTSC models	768 H x 494 V

Sensitivity (3200 K)

Model	Usable picture (30 IRE)	Usable picture (50 IRE)	Full video (100 IRE)
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Color

VDC-480V03	Color	0.16 lx (0.015 fc)	0.35 lx (0.033 fc)	1.4 lx (0.13 fc)
	Color + 10 x SensUp	0.016 lx (0.0015 fc)	0.035 lx (0.0033)	0.14 lx (0.013 fc)
	NightSense	0.056 lx (0.0052 fc)	0.13 lx (0.012)	0.5 lx (0.046)
VDC-480V04	NightSense+ 10 x SensUp	0.0056 lx (0.00052 fc)	0.013 lx (0.0012)	0.05 lx (0.0046)
	Color	0.4 lx (0.037 fc)	0.9 (0.083)	3.6 (0.33)
	Color + 10 x SensUp	0.04 lx (0.0037 fc)	0.09 (0.0083)	0.36 (0.033)
VDC-480V09	NightSense	0.14 lx (0.013 fc)	0.32 (0.03)	1.3 (0.12)
	NightSense+ 10x SensUp	0.014 lx (0.0013 fc)	0.032 (0.003)	0.13 (0.012)
	Color	0.28 lx (0.027 fc)	0.62 lx (0.058 fc)	2.48 lx (0.23 fc)
VDC-480V09	Color + 10 x SensUp	0.028 lx (0.0027 fc)	0.062 lx (0.0058)	0.248 lx (0.023 fc)
	NightSense	0.099 lx (0.0092 fc)	0.23 lx (0.021)	0.88 lx (0.081)
	NightSense+ 10 x SensUp	0.0099 lx (0.00092)	0.023 lx (0.0021)	0.088 lx (0.0081)

SensUp	Automatic continuous up to 10 x, off selectable
Horizontal resolution	540 TVL
Signal-to-noise ratio	>50 dB
AGC	Auto, maximum level selectable 28 dB
Auto black	On/off selectable
Electronic shutter	Flickerless, on/off, default shutter
NightSense	Auto, forced, off selectable
Dynamic range	32 x dynamic range enhancement
Dynamic noise reduction	Automatic, off, selectable

Sharpness correction	Horizontal and vertical, symmetrical
Backlight compensation	Off, programmable window and level selectable
White balance	Automatic sensing (2500 to 9000 K), AWB hold and manual
Video motion detector	Four (4) areas, sensitivity selectable
Camera ID	16-character editable string, position selectable
Video output	Composite video 1.0 Vpp, 75 ohm
Remote control	Bi-directional coaxial communication
Synchronization	Internal or LineLock*
Connector	Flying leads (through the back)

* *LineLock (only when AC-powered) synchronizes the camera to the power line zero crossing for roll-free vertical interval switching. Vertical phase delay can be adjusted (from 0° to 358°) to allow vertical synchronization in multi-phase power installations.*

Optical

Varifocal	Manual zoom and focus adjustment
Iris control	Automatic iris control
Viewing angle	
3 to 9.5 mm	Wide 95° x 69° (H x V) Tele 30.2° x 22.6° (H x V)
3.7 to 12 mm	Wide 76.1° x 55.8° (H x V) Tele 23.8° x 17.9° (H x V)
9 to 22 mm	Wide: 31.2° x 22.8° (H x V) Tele: 12.8° x 9.6° (H x V)

Mechanical

Dimensions	See drawings
Weight	740 g (1.63 lb)
Mounting	Flush on hollow surface with three (3) screws in a 4S electrical box
Color	White (RAL9010) trim ring with black inner liner
Adjustment range	360° pan, 90° tilt, ±90° azimuth
Dome bubble	Polycarbonate, clear with UV blocking anti-scratch coating
Trim ring	Polycarbonate

Environmental

Operating temperature	-10 °C to +45 °C (-14 °F to +113 °F)
Storage temperature	-40 °C to +70 °C (-40 °F to +158 °F)
Humidity	5% to 93% relative humidity

Ordering Information

VDC-480V03-10 Indoor Color Model 1/3-inch, PAL color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/3-9.5 mm F1.0 Varifocal lens, white	VDC-480V03-10
VDC-480V03-10S Indoor Color Model, Surface mount 1/3-inch, PAL color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/3-9.5 mm F1.0 Varifocal lens, white, surface mount	VDC-480V03-10S
VDC-480V03-20 Indoor Color Model 1/3-inch, NTSC color, 540 TVL, 12 VDC/ 24 VAC, 60 Hz, w/3-9.5 mm F1.0 Varifocal lens, white	VDC-480V03-20
VDC-480V03-20S Indoor Color Model, Surface mount 1/3-inch, NTSC color, 540 TVL, 12 VDC/ 24 VAC, 60 Hz, w/3-9.5 mm F1.0 Varifocal lens, white, surface mount	VDC-480V03-20S
VDC-480V04-10 Indoor Color Model 1/3-inch, PAL color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/3.7-12 mm F1.0 Varifocal lens, white	VDC-480V04-10
VDC-480V04-10S Indoor Color Model, Surface mount 1/3-inch, PAL color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/3.7-12 mm F1.0 Varifocal lens, white, surface mount	VDC-480V04-10S
VDC-480V04-20 Indoor Color Model 1/3-inch, NTSC color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/3.7-12 mm F1.0 Varifocal lens, white	VDC-480V04-20
VDC-480V04-20S Indoor Color Model, Surface mount 1/3-inch, NTSC color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/3.7-12 mm F1.0 Varifocal lens, white, surface mount	VDC-480V04-20S
VDC-480V09-10 Indoor Color Model 1/3-inch, PAL color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/9-22 mm F1.0 Varifocal lens, white	VDC-480V09-10
VDC-480V09-10S Indoor Color Model, Surface mount 1/3-inch, PAL color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/9-22 mm F1.0 Varifocal lens, white, surface mount	VDC-480V09-10S
VDC-480V09-20 Indoor Color Model 1/3-inch, NTSC color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/9-22 mm F1.0 Varifocal lens, white	VDC-480V09-20
VDC-480V09-20S Indoor Color Model, Surface mount 1/3-inch, NTSC color, 540 TVL, 12 VDC/ 24 VAC, 50 Hz, w/9-22 mm F1.0 Varifocal lens, white, surface mount	VDC-480V09-20S

Ordering Information

Accessories	
VDA-445SMB Surface mount box, indoor for VDM-345 and VDC-445	VDA-445SMB
VDA-445WMT Wall mounting bracket	VDA-445WMT
VDA-455PMT Pendant pipe mount	VDA-455PMT
VDA-455CMT Corner mounting bracket for interior corner	VDA-455CMT
VDA-455UTP Adaptor for UTP twisted pair output	VDA-455UTP
VDA-455TBL Tinted bubble Tinted bubble for FlexiDome series	VDA-455TBL
VDA-455CBL Clear bubble Clear Bubble for FlexiDome series	VDA-455CBL
S1460 Service/Monitor Cable for FlexiDome XT (2.5 mm connector to BNC), 1 m	S1460
UPA-1509-60 Power Supply 120 VAC, 60 Hz, 15 VDC, 9 VA Out	UPA-1509-60
UPA-1509-50 Power Supply 220 VAC, 50 Hz, 15 VDC, 9 VA Out	UPA-1509-50
UPA-2420-50 Power Supply 220 VAC, 50 Hz, 24 VAC, 20 VA Out	UPA-2420-50
UPA-2450-50 Power Supply 220 VAC, 50 Hz, 24 VAC, 50 VA Out	UPA-2450-50
Software Options	
VP-CFGSFT Configuration Software for cameras using Bilinx, includes VP-USB Adaptor	VP-CFGSFT

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