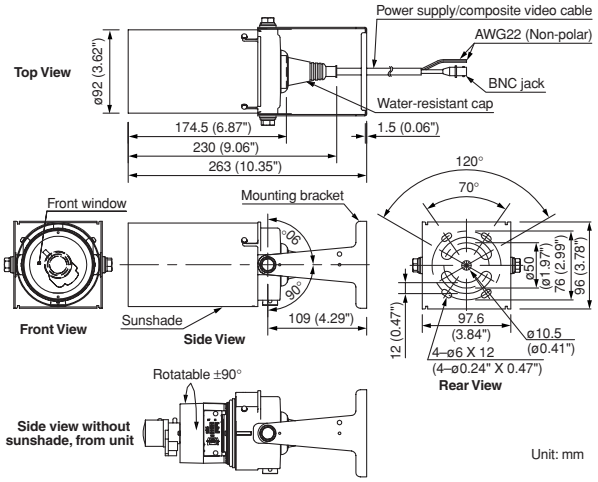
C-CV454D-3/-9/18
Outdoor Day/Night Camera



APPEARANCE AND DIMENSIONAL DIAGRAM



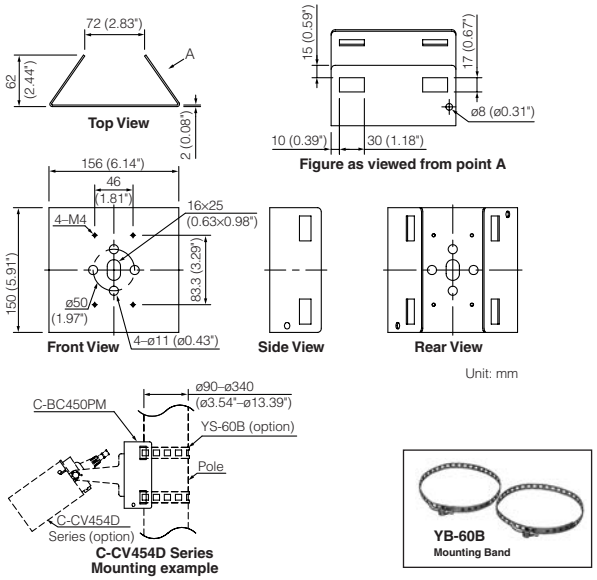
DESCRIPTION

The C-CV454D series is a high-resolution color camera that can be operated on 24V AC or 12V DC power. The camera complies with the IP66 standard, enabling it to be installed in areas directly exposed to rain, making it deal for such outdoor installations as parking areas, gas stations and entrances to banking facilities.

The C-CV454D series operates as a color camera in daylight, and as a highly sensitive monochrome camera in darkness. It is equipped with noise reduction and 4X electronic sensitivity boost, to facilitate image monitoring at night. The sensitivity boost and noise reduction through digital processing features also ensure that the camera will capture clear images.

Users can choose from among three models, each having a different focal length, to best suit the distance to the subject. This broadens the range of the angle of view and makes possible more effective monitoring.

C-BC450PM
Pole Mount Bracket



Designed to mount the C-CV454D Series on a pole in conjunction with the optional YS-60B.

SPECIFICATIONS

Applicable Pole Diameter: ø90 – ø340mm (ø3.54 – ø13.4")
Finish: Stainless steel
Dimensions: 156 (W) × 150 (H) × 62 (D)mm (6.14" × 5.91" × 2.44")
Weight: 660g (1.46 lb)
Applicable Camera: C-CV454D-3, C-CV454D-9 and C-CV454D18
Option: Mounting band: YS-60B

TOA

NTSC

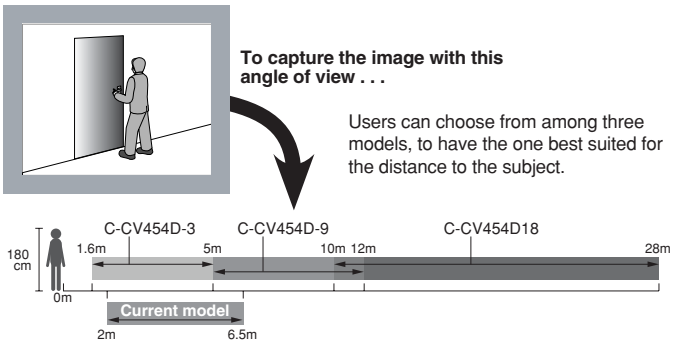
FEATURES

■ High-performance CCDs

- C-CV454D series incorporates a 1/3" CCD with a resolution of 380,000 pixels, resulting in a high horizontal resolution that exceeds 540 lines (C-CV454D-9/18: 480 lines).

■ Three models with different focal lengths available:

- C-CV454D-3: Focal length: f=3.0 – 9.0 mm
  Angle of view: Horizontal 90.3° - 31.9°
  Vertical 66.4° - 23.9°
- C-CV454D-9: Focal length: f=9.0 – 22.0 mm
  Angle of view: Horizontal 30.6° - 13.0°
  Vertical 22.6° - 9.8°
- C-CV454D18: Focal length: f=18.0 – 50.0 mm
  Angle of view: Horizontal 14.6° - 5.6°
  Vertical 10.9° - 4.2°
- Optimal camera angle of view is extendable, enhancing coverage over a wide range for more effective monitoring.



In order to get the angle of view shown in the illustration, current models can only cover a distance of 2 – 6.5 meters between the camera and the subject. The new models, however, can cover a distance of 1.6 – 28 meters.

■ Waterproof performance: compliance with IP66

- Video output connector is also water-resistant.



■ Minimum required illumination: 0.05 lx (50 IRE, black-and-white operation)

- Equipped with Day/Night Function, which captures a clear image of the subject even in darkness

■ Maximum 4X sensitivity up function

■ Backlight compensation and flicker-free function for easier viewing

■ Digital noise reduction

- Captures clear, virtually noise-free images under poorly lit places.

■ Easy focus adjustment without ND filter

■ Flexible power requirements

- 24V AC or 12V DC operation

■ Monitor output RCA pin jack

- Easy to access location just under the dome cover enabling quick and simple on-site adjustment saving labor.

SPECIFICATIONS

Model No.	C-CV454D-3	C-CV454D-9	C-CV454D18
Power Source	24V AC, 50/60Hz or 12V DC		
Power Consumption	4W (300mA, maximum current: 800 mA)		
Image Device	1/3 type IT-CCD		
Number of Effective Pixels	771 (H) × 492 (V) (380,000 pixels)		
Scanning System	2:1 interlace		
Scanning Frequency	Horizontal: 15.734kHz, Vertical: 59.94Hz		
Monitor Output	VBS 1.0V (p-p) 75Ω, RCA pin jack		
Video Output	VBS 1.0V (p-p) 75Ω, water-resistant connector		
Synchronizing System	Internal synchronization		
Resolution (at center)	Horizontal: 540 lines (standard), Vertical: 350 lines	Horizontal: 480 lines or more, Vertical: 350 lines	
S/N Ratio	50dB		
Minimum Illumination	0.5 lx (50 IRE, color operation), 0.1 lx (20 IRE, color operation) 0.05 lx (50 IRE, black-and-white operation, incandescent lamp) *Flickerless: OFF		
Threshold Illumination for mode switching	Color-to-B/W mode: Approx. 5 lx, B/W-to-color mode: Approx. 25 lx (incandescent lamp)		
White Balance Mode	ATW/AWB (switch selector)		
Focal Length	f = 3.0 – 9.0mm	f = 9.0 – 22.0mm	f = 18.0 – 50.0mm
Maximum Aperture Ratio	1:1.4 – 2.4	1:1.5 – 2.9	1:1.5 – 2.3
Iris	Auto-iris		
Angle of View	Horizontal: 90.3° – 31.9°, Vertical: 66.4° – 23.9°	Horizontal: 30.6° – 13.0°, Vertical: 22.6° – 9.8°	Horizontal: 14.6° – 5.6°, Vertical: 10.9° – 4.2°
Adjustment Switch	ON/OFF (used for focus adjustment)		
Day/Night Mode	Automatic/Off (switch selector)		
Other Function	Backlight compensation, Shutter speed, Iris control, Max. 4X sensitivity increase (auto), Noise reduction		
Dust/Water Protection	IP66		
Operating Temperature	–10˚C to +50˚C (14°F to 122°F)		
Operating Humidity	Under 90% RH (no condensation)		
Finish	Front cover, rear cover, sunshade: Aluminum, light gray, paint Mounting bracket: Stainless steel, light gray, paint		
Dimensions	ø92 × 230 (D)mm (ø3.62" x 9.06") (excluding mounting bracket)		
Weight	1.2kg (2.65 lb)		
Accessories	Mounting bracket × 1, Bracket mounting bolt (with washer, stainless steel) × 2, Insulating spacer × 2, Cable with waterproof cap (2m (6.56 ft)) × 1		

ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

GENERAL REQUIREMENTS

The product specified shall be a high-resolution, outdoor day/night camera which can be operated on 24V AC or 12V DC power. This camera shall be designed for outdoor surveillance applications. The camera shall meet IP66 enclosure protection. The camera shall be equipped with a water-resistant video output connector.

The camera system shall consist of a high resolution CCD camera (NTSC: 380,000 pixels) using 1/3" type CCD image device with an auto-iris varifocal lens. The specified camera's body shall be made of aluminum. The specified camera shall operate as a color camera in daylight, and as a highly sensitive monochrome camera in darkness, and automatically boost electronic sensitivity up to 4X according to the objects' illumination. The camera shall have a noise reduction function to ensure clear images even under poor lighting conditions and a function to reduce monitor image flicker caused by fluorescent lighting. The camera shall provide selectable on/off backlight compensation function and focus adjustment switch which allow the installer to easily perform focus adjustment without using an ND(Neutral Density) filter. The camera shall provide selectable on/off white balance operation. Monitor output shall provide a convenient monitor connection for installer to align the camera. The optional mounting bracket shall allow the camera to be mounted on a pole.

(C-CV454D-3)

CAMERA SPECIFICATIONS

Resolution (at center):
Horizontal: 540 lines, vertical: 350 lines
Scanning System: 2:1 interlace
Scanning Frequency:
Horizontal: 15.734 kHz, vertical: 59.94 Hz
S/N Ratio: 50 dB
Minimum Illumination (Flickerless off):
0.5 lx (50 IRE, color operation),
0.1 lx (20 IRE, color operation),
0.05 lx (50 IRE, black-and-white operation, incandescent lamp)

LENS SPECIFICATIONS

Focal Length: f=3.0 – 9.0 mm
Maximum Aperture Ratio: 1 :1.4 – 2.4
Angle of View:
Horizontal: 90.3° – 31.9°, Vertical: 66.4° – 23.9°

ELECTRICAL SPECIFICATIONS

Power Source: 24V AC, 50/60Hz or 12V DC
Power Consumption:
4W (300mA, maximum current: 800 mA)
Monitor Output:
VBS 1.0V (p-p) 75 ohms, RCA pin jack
Video Output:
VBS 1.0V (p-p) 75 ohms, water-resistant connector

MECHANICAL SPECIFICATIONS

Dimensions: ø92 × 230(H) mm (3.62" × 9.06") (excluding mounting brackets)
Weight: 1.2 kg (2.65 lb)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:
-10°C to +50°C (14°F to 122°F)
Operating Humidity:
Under 90%RH (no condensation)

CERTIFICATIONS AND RATINGS

This device complies with part 15 of FCC rules (class B equipment).
Safety: cULus (UL2044)

The outdoor day/night camera shall be TOA model C-CV454D-3.
The pole mount bracket shall be C-BC450PM.

(C-CV454D-9)

CAMERA SPECIFICATIONS

Resolution (at center):
Horizontal: 480 lines or more, vertical: 350 lines
Scanning System: 2:1 interlace
Scanning Frequency:
Horizontal: 15.734 kHz, vertical: 59.94 Hz
S/N Ratio: 50 dB
Minimum Illumination (Flickerless off):
0.5 lx (50 IRE, color operation),
0.1 lx (20 IRE, color operation),
0.05 lx (50 IRE, black-and-white operation, incandescent lamp)

LENS SPECIFICATIONS

Focal Length: f=9.0 – 22.0 mm
Maximum Aperture Ratio: 1 :1.5 – 2.9
Angle of View:
Horizontal: 30.6° – 13.0°, Vertical: 22.6° – 9.8°

ELECTRICAL SPECIFICATIONS

Power Source: 24V AC, 50/60Hz or 12V DC
Power Consumption:
4W (300mA, maximum current: 800 mA)
Monitor Output:
VBS 1.0V (p-p) 75 ohms, RCA pin jack
Video Output:
VBS 1.0V (p-p) 75 ohms, water-resistant connector

MECHANICAL SPECIFICATIONS

Dimensions: ø92 × 230(H) mm (3.62" × 9.06") (excluding mounting brackets)
Weight: 1.2 kg (2.65 lb)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:
-10°C to +50°C (14°F to 122°F)
Operating Humidity:
Under 90%RH (no condensation)

CERTIFICATIONS AND RATINGS

This device complies with part 15 of FCC rules (class B equipment).
Safety: cULus (UL2044)

The outdoor day/night camera shall be TOA model C-CV454D-9.
The pole mount bracket shall be C-BC450PM.

(C-CV454D18)

CAMERA SPECIFICATIONS

Resolution (at center):
Horizontal: 480 lines or more, vertical: 350 lines
Scanning System: 2:1 interlace
Scanning Frequency:
Horizontal: 15.734 kHz, vertical: 59.94 Hz
S/N Ratio: 50 dB
Minimum Illumination (Flickerless off):
0.5 lx (50 IRE, color operation),
0.1 lx (20 IRE, color operation),
0.05 lx (50 IRE, black-and-white operation, incandescent lamp)

LENS SPECIFICATIONS

Focal Length: f=18.0 – 50.0 mm
Maximum Aperture Ratio: 1 :1.5 – 2.3
Angle of View:
Horizontal: 14.6° – 5.6°, Vertical: 10.9° – 4.2°

ELECTRICAL SPECIFICATIONS

Power Source: 24V AC, 50/60Hz or 12V DC
Power Consumption:
4W (300mA, maximum current: 800 mA)
Monitor Output:
VBS 1.0V (p-p) 75 ohms, RCA pin jack
Video Output:
VBS 1.0V (p-p) 75 ohms, water-resistant connector

MECHANICAL SPECIFICATIONS

Dimensions: ø92 × 230(H) mm (3.62" × 9.06") (excluding mounting brackets)
Weight: 1.2 kg (2.65 lb)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature:
-10°C to +50°C (14°F to 122°F)
Operating Humidity:
Under 90%RH (no condensation)

CERTIFICATIONS AND RATINGS

This device complies with part 15 of FCC rules (class B equipment).
Safety: cULus (UL2044)

The outdoor day/night camera shall be TOA model C-CV454D18.
The pole mount bracket shall be C-BC450PM.

TOA Corporation
www.toa.jp

Specifications are subject to change without notice.
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