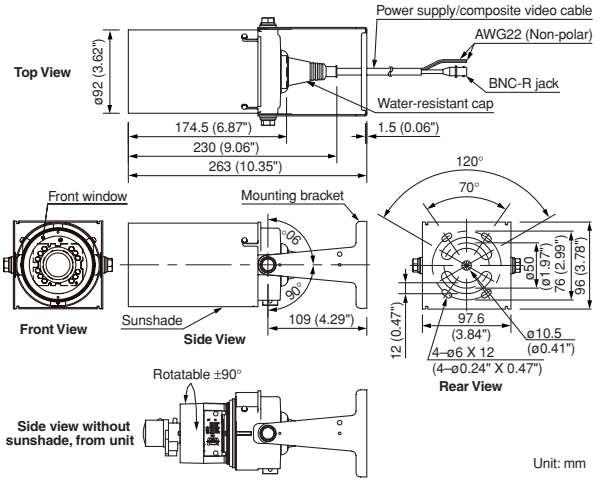
C-CV454R-3
Outdoor Day/Night IR Camera



APPEARANCE AND DIMENSIONAL DIAGRAM

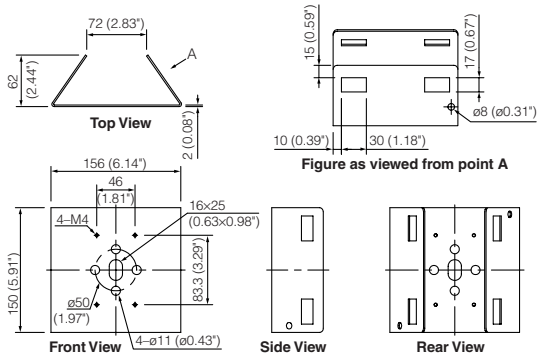


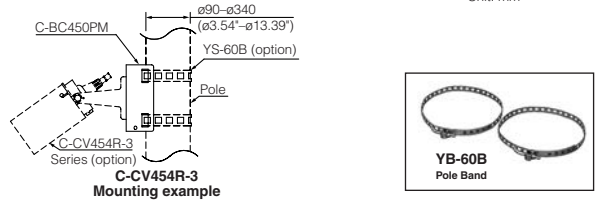
DESCRIPTION

The C-CV454R-3 is a high-resolution, infrared day/night 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 the applications where around the clock coverage is essential.

The C-CV454R-3 operates as a color camera in daylight, and as a highly sensitive monochrome camera in darkness. In the nighttime, it can view the subject even under completely dark conditions by automatically turning on its built-in infrared LED illuminator capable of covering the visible range of up to 25 m (82.02 ft.) (in high-sensitivity mode). The C-CV454R-3 incorporates a 3X varifocal lens, which facilitate adjustment of the camera's view angle during installation. This, coupled with the noise reduction and 8X electronic sensitivity boost functions that facilitate image monitoring at night through digital processing, ensures that the camera will always capture clear images.

C-BC450PM
Pole Mount Bracket





Designed to mount the TOA CCTV Cameras 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)
Option: Pole band: YS-60B

NTSC

FEATURES

Around-the-clock surveillance

- An infrared LED feature makes it possible to capture clear images for monitoring even in total darkness (0 lx).





Human eye/ Conventional camera

Produces clear images for monitoring even in darkness so total that the human eye cannot see.

These photos are intended to serve only as an illustration.

- Infrared LED light can reach at a distance of about 25m (82.02 ft.). *Outdoors

High resolution (horizontal: 540 lines)

- 1/3" CCD with a resolution of 380,000 pixels

Maximum 8X sensitivity up function

Dust- and water-proof construction (IP66)

- Video output connector is also water-resistant.



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

Easy installation

- 3-axis (horizontal, vertical and rotational) adjustment mechanism
- Direct output to the monitor

Wide range of view angles (3X varifocal lens)

- Horizontal: 90.3° – 31.9°, Vertical: 66.4° – 23.9°, Diagonal: 115.4° – 39.8°

SPECIFICATIONS

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	768 (H) × 494 (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
S/N Ratio	50dB
Minimum Illumination	0.5 lx (50 IRE, color, high-sensitivity switch OFF), 0.2 lx (20 IRE, color, high-sensitivity switch OFF) 0 lx (night mode) *Flickerless: OFF
Threshold Illumination for mode switching	Color-to-B/W mode: Approx. 2 lx, B/W-to-color mode: Approx. 10 lx (incandescent lamp)
White Balance Mode	ATW/AWB (switch selector)
Focal Length	f = 3.0 – 9.0mm
Maximum Aperture Ratio	1:1.4 – 2.4
Iris	Auto-iris
Angle of View	Horizontal: 90.3° – 31.9°, Vertical: 66.4° – 23.9°, Diagonal: 115.4° – 39.8°
Infrared LED's Illumination Range	Indoors: Approx. 18m (59.06 ft) (high-sensitivity switch OFF). Approx. 25m (82.02 ft) (high-sensitivity switch ON) Outdoors: Approx. 15m (49.21 ft) (high-sensitivity switch OFF). Approx. 25m (82.02 ft) (high-sensitivity switch ON)
Function	Backlight compensation, Flickerless function, Iris control, Max. 8X sensitivity increase (auto/off), Noise reduction (24-hour), Day/night mode (auto selector), Adjustment Switch: ON/OFF (used for focus adjustment)
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" × 9.06") (excluding mounting bracket)
Weight	1.2kg (2.65 lb)
Accessories	Mounting bracket × 1, Insulating spacer × 2, Bracket mounting bolt (with washer, stainless steel) × 2, Cable with waterproof cap (2m (6.56 ft)) × 1
Option	Pole mount bracket: C-BC450PM Pole band: YS-60B

ARCHITECTURAL AND ENGINEERING SPECIFICATIONS

GENERAL REQUIREMENTS

The specified product shall be a high-resolution, outdoor-use, 24V AC/12V DC-powered day/night infrared camera equipped with a 3X varifocal lens and featuring a 1/3-inch CCD that offers a high resolution of 380,000 pixels (NTSC). The camera shall comply with the IP 66 Dustproof/Waterproof Standard and come with a cable equipped with a water-resistant cap that enables the camera to be used for outdoor surveillance.

The camera shall be capable of automatically switching from color ("Day") mode to black-and-white ("Night") mode when the subject illumination is reduced, and from black-and-white ("Night") mode to color ("Day") mode when the illumination increases, so that the camera functions as a color camera in bright areas, and as a black-and-white camera in dark areas by mechanically attaching and detaching an infrared block filter. In Night mode, the camera shall be capable of viewing the subject even in ambient illumination conditions as low as 0 lx with the aid of its built-in infrared LED illuminator, which shall be capable of lighting a visible range of up to 25 m (82.02 ft.) (in high-sensitivity mode), both indoors and outdoors.

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 specified product shall offer a backlight compensation function which allows optimal viewing of dark areas in a backlight condition, and focus adjustment switch which allows the installer to easily perform focus adjustment without using an ND (Neutral Density) filter.

The following two options must be made available: (1) ATW (Automatic Tracking White), a function that automatically adjusts the camera white balance to match variations in subject color temperature, and (2) AWB (Auto White Balance) that fixes the color by adjusting the white balance. The camera shall also be designed to enable its built-in AGC (automatic gain control) function when the image is dark, and to enable its high-sensitivity function when the image becomes much darker. The camera shall automatically boost electronic sensitivity up to 8X according to the objects' illumination.

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.

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, high-sensitivity switch OFF),
0.2 lx (20 IRE, color, high-sensitivity switch OFF),
0 lx (night mode)
Threshold Illumination for Mode Switching:
Color-to-B/W mode: Approx. 2 lx
B/W-to-color mode: Approx. 10 lx (incandescent lamp)
White Balance: ATW/AWB (switch selector)

LENS SPECIFICATIONS

Focal Length: f=3.0 – 9.0 mm
Maximum Aperture Ratio: 1 :1.4 – 2.4
Iris: Auto-iris
Angle of View: Horizontal: 90.3° – 31.9°, Vertical: 66.4° – 23.9°,
Diagonal: 115.4° – 39.8°

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
Video Output: VBS 1.0V (p-p) 75 ohms
Synchronizing System: Internal synchronization

MECHANICAL SPECIFICATIONS

Monitor Output: RCA pin jack
Video Output: Water-resistant connector
Dimensions: ø92 × 230(D) mm (ø3.62" × 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

Safety: cULus (UL2044), Part 15 of FCC rules (class B equipment)
Water/dust protection: IP66 rated.

The outdoor day/night IR camera shall be TOA model C-CV454R-3.
The pole mount bracket shall be C-BC450PM.
The band for pole mount bracket shall be YS-60B.

TOA Corporation
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Specifications are subject to change without notice.
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