CC03-IP2MVFIR Installation Manual

Opticom Technologies Inc.
www.opticomtech.com
www.toughestvideocamera.com

USA Sales: Battle Creek, Michigan: 800-578-1853
Canada: Head Office (Vancouver): 855-569-3240

March 2016

IMPORTANT SAFETY INSTRUCTIONS

1. Read and keep these instructions. Heed all warnings.
2. Do not use this apparatus near water.
3. Clean only with dry cloth.
4. Do not block any ventilation openings. Install in accordance with manufacturer instructions.
5. Do not install near any heat sources such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
6. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the power where they exit from the device.
7. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in a way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
8. To reduce the risk of ignition of hazardous atmospheres, disconnect the equipment from the supply circuit before opening. Keep assembly tightly closed when in operation.
9. The maximum ambient temperature range is –40° to 122°F (–40° to 50°C).
10. Installation should be done only by qualified personnel and conform to all local codes.
11. Use only installation methods and materials capable of supporting four times the maximum specified load.

WARNING: To reduce the risk of ignition of hazardous atmospheres, disconnect the device from the supply circuit before opening. Keep assembly tightly closed when operating.

WARNING: To reduce the risk of ignition of hazardous atmospheres, conduit runs must have a sealing fitting connected within 2 inches of the enclosure.

TO REDUCE THE RISK OF IGNITION DO NOT OPEN WHEN AN EXPLOSIVE GAS ATMOSPHERE MAY BE PRESENT.

DISCLAIMER: Opticom Technologies Inc. will not be responsible for injuries or damages resulting from the improper installation or use of any product sold by Opticom Technologies Inc. their agents, distributors or dealers.

CC03-IP2MVFIR Camera

CAMERA DESCRIPTION

- 2.43 Megapixel CMOS Image Sensor
- 3.5~16mm Varifocal Auto-Iris Lens
- 10/100-Base-T Ethernet (auto-sensing) Interface
- Maximum Frame Rate of 30FPS @ 2MP (1920x1080)
- Dual Streaming (H.264, MJPEG codecs)
- 39 Piece Infrared Array - 20m Range
- Supports PoE or 12V DC direct power

HOUSING DESCRIPTION/FEATURES

- Copper free aluminum body
- ¾" NPT conduit feed-through hubs, offset for maximum clearance and capacity
- 60 chamfer on window opening provides enhanced viewing angle
- Internal and external ground screws and tamper resistant cover set screws for extra safety
- 2-5/8" diameter tempered glass window for local read out or display
- Buna-Nitrile rubber gasket for NEMA Type 4X watertight applications

FINISH

- Corrosion resistant Industrial and Marine Coating.
- TILE-CLAD® HIGH SOLIDS is a VOC compliant, two-package, epoxy-polyamide coating
- Chemical resistant
- Dry film resists bacterial attack
- Abrasion resistant
- Suitable for use in USDA inspected facilities
- Low VOC

PARTS LIST

- CCO3-IP2MVFIR CAMERA
- Software & Manual DVD
- 12V DC 500mA Regulated Power Adaptor
- Allen Key (for housing cover set screw)

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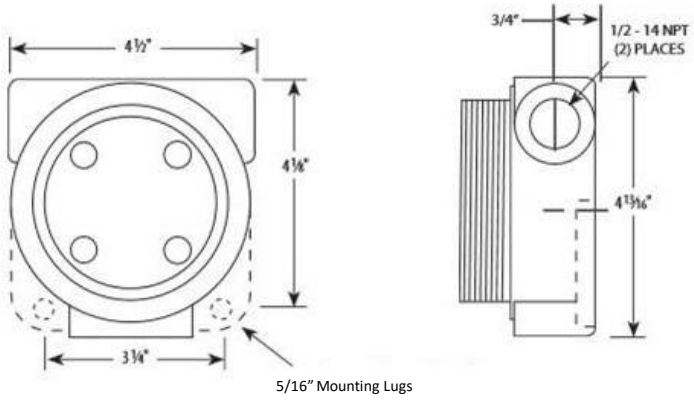
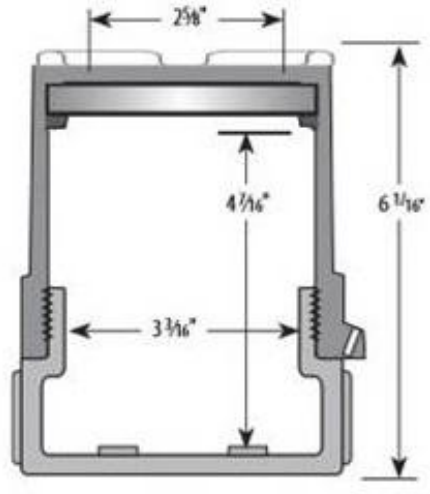
HOUSING DIMENSIONS



5/16" Mounting Lugs



CC03-IP2MVFIR Camera

INSTALLATION

Install with the appropriate hardware to suit the mounting surface. Select a suitable location that is protected from accidental damage or tampering, and environmental conditions that could exceed the camera's general specifications. Ensure the selected location is protected from falling objects, accidental contact with moving objects, and unintentional interference from personnel. Follow all applicable building codes.

NOTE: Make sure the camera is correctly oriented when mounting – see picture below:

The "TOP" designation label on the housing indicates the correct upright viewing orientation for the camera lens.

The weight of the camera is 2.27 KG (5 lbs). It is recommended that all hardware used for mounting be capable of supporting four times the actual weight of the unit (ie: 10 KG or 20 lbs).

The camera must be bolted to the mounting surface using the 5/16" mounting lugs as shown in the picture above. Rubber washers should be installed on the housing side of the bolts to avoid damage to the epoxy housing finish. Fluorosilicone or Aramid/Buna-N type washers are recommended for maximum oil, abrasion, chemical and weather resistance

CAUTION! Do not remove the housing cover when mounting the camera to prevent damage to the camera module and interior components. The housing cover should only be removed after mounting to allow for the focusing of the lens to the desired focal length. See details of lens focusing below.

CC03-IP2MVFIR Camera

ELECTRICAL

During installation, it is important to attach a 10 AWG copper stranded wire (**minimum requirement**) from the earth ground attachment point on the unit to an appropriate grounding location for your installation.

The camera can be powered either by PoE (802.3af) (power over ethernet)or by 12VDC using LVT connected the 2.1mm power jack.

WARNING! CSA Certified / UL Listed CLASS 2 power adaptors must be used in order to comply with electrical safety standards. A UL certified power adaptor is included with the unit. For permanent installation using 12VDC adaptor in Canada ensure that a CSA certified adaptor is installed.

LENS FOCUSING

After mounting the camera, carefully remove the housing cover after loosening the set screw.

WARNING! Avoid thread damage. Never use force when removing or assembling housing cover. Ensure that the Buna-N rubber gasket is correctly positioned at the base of the threaded flange before reattaching the housing cover. Failure to correctly reinstall the housing cover will compromise the sealing of the unit.

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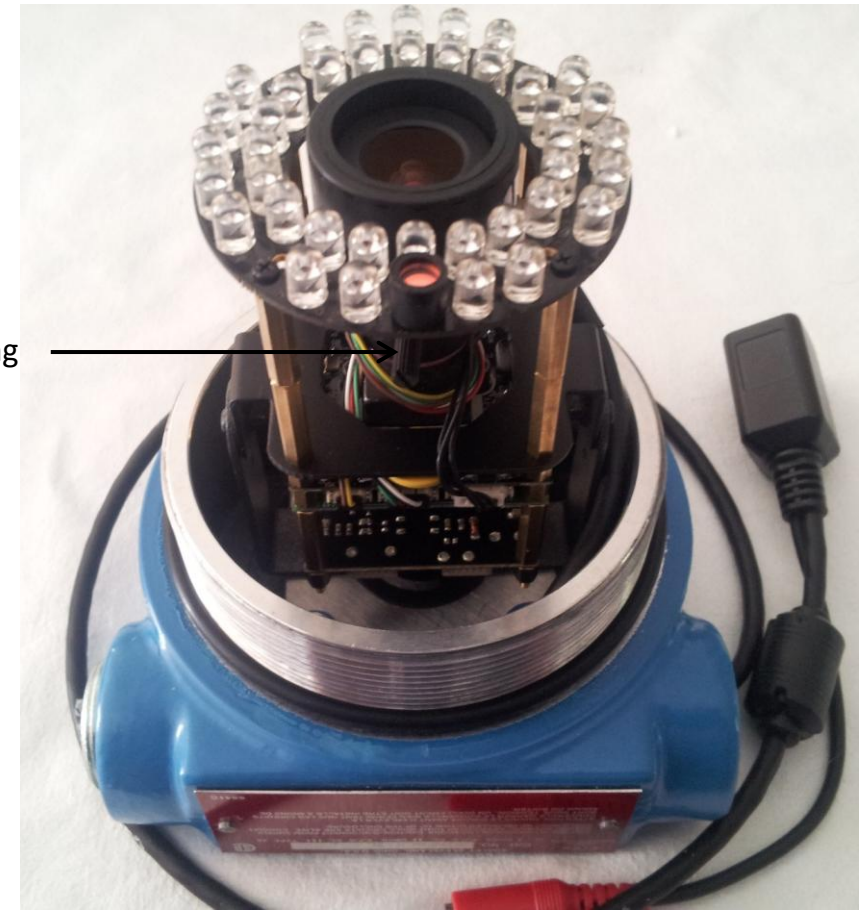
LENS FOCUSING

Removing the housing cover allows access to the varifocal lens adjustment screws. The CC03-IP2MVFIR camera module is equipped with a 3.5~16mm varifocal lens allowing for a viewing angle of between 68 º and 17 º respectively. There are two adjusting screws below the infrared assembly. The upper adjusting screw controls the zoom (ie. focal length) while the bottom adjusting screw focuses the image after the focal length has been selected.

Lens Adjusting Screws



Connect the camera to the network using the provided IP Installer software. The camera can also be connected directly to a laptop using a switch with a Default Gateway of 192.168.0.1 which is the camera default setting. Adjust the focal length manually using the adjusting screws to obtain the desired image. Tighten the adjusting screws and carefully reinstall the housing cover.

For camera **Operation and Settings** refer to the **IP Installers User Manual** on the DVD included with the unit.

CC03-IP2MVFIR Camera

Specifications	CC03-IP2MVFIR
Video Encoding	H.264/MJPEG(simultaneous dual stream)
	H.264/H.264 (true H.264 dual streaming)
	Simultaneous streaming with independent control
Resolution	1920x1080, 1280x720,640x352, 320x176, 160x96
Serial Interface	Console, By-pass command to control UART device
Bandwidth Management	Frame rate control / Bandwidth control / CBR / VBR
External Interface	10/100-Base-T Ethernet (auto-sensing), 1 DI/DO(3.3V TTL),
Image Sensor	1/2.9" progressive scan CMOS
	Total number of pixels: 2000H×1241V=2.48M
	Pixel size : 2.5 8 (H) μm × 2.5 8 (V) μm
	Color filter Bayer arrangement of primary colors: R, G, B
	Bit number of internal ADC: 10/12 bits
	Parallel output: 37.125 MHz, 10/12 bits
	Maximum frame rate in all-pixel scan mode: 60/30 fps
Image Controls	Day & Night (Auto/B&W/Off), AWB, Noise Filter (Off/On),
Illumination	0.0016 Lux
Lens / IR	3.5~16mm Varifocal Lens / 39 Pc IR LED - 20m Range
Housing	Epoxy Coated Die Cast Aluminum (Copper Free)
Power	POE or 12V DC (4.8W Max. Consumption)
Color	Pantone 293 Blue
Ground Screws	Internal & External
Cover Set Screw	Tamper Resistant Cover Set Screws
O Ring	Buna N
Conduit Connections	2 x 3/4" NPT Standard Connections
External Mounting Holes	2 x 0.33in / 8.4mm
Dimensions (H x W)	4.86 x 5.65 inches / 12.4 x 14.4 cm
Weight	5 lbs (2.27 kg)
Operation Temp.	-40C ~ 50C

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