



## IV-H500CA

Standard, Color, Automatic focus model



## Specifications

Model	IV-H500CA	
Type	Standard distance	
Installed distance	50 to 500 mm 1.97" to 19.69"	
View	Installed distance 50 mm 1.97": 25 (H) × 18 (V) mm 0.98" (H) × 0.71" (V) to installed distance 500 mm 19.69": 210 (H) × 157 (V) mm 8.27" (H) × 6.18" (V)	
Image sensor	Type	1/3 inch color CMOS
	Pixel	752 (H) × 480 (V) 29.61" (H) × 18.90" (V)
Focus adjustment	Auto*1	
Exposure time	1/10 to 1/50,000	
Lights	Illumination	White LED
	Lighting method	Pulse lighting/DC lighting is switchable
Tools	Type	Shape Detection, Color Area*2, Area*3, Edge Pixels, Width/Height, Diameter, Edge Presence, Pitch, Position Adjustment, High Speed Position Adjustment (1-Axis/2-Axis Adjustment)
	Number	Detection tools: 16 tools, position adjustment tool: 1 tool*4
Switch settings (programs)	32 programs	
Image history	Numbers	100 images*5*6
	Condition	NG only/All is selectable*6
Analysis information	OFF/Statistics/Histograms/Matching rate list is switchable Statistics: Processing time (latest value, MAX, MIN, AVE), number of OKs, number of NGs, trigger numbers, trigger errors, judgment results list by tools Histograms: Histogram, matching degree (latest value, MAX, MIN, AVE), numbers of OKs, numbers of NGs Matching rate list: Judgment results list by tools, matching rate list by tools, judgment bar list by tools*7	
Other functions	HDR, HighGain, Color filters*2, Digital zoom*8, Brightness correction, Tilt correction, White balance*2, Mask function, Color histogram, Test run, ToolAutoTune, Input monitor, Output test, Security settings, Simulator*9, Sensor date/time information addition, Scaling function, Failing sensor list, Failure hold	
Indicators	PWR/ERR, OUT, TRIG, STATUS, LINK/ACT	
Input	Type	Non-voltage input/voltage input is switchable For non-voltage input: ON voltage 2 V or lower, OFF current 0.1 mA or lower, ON current 2 mA (short circuit) For voltage input: Maximum input rating 26.4 V, ON voltage 18 V or higher, OFF current 0.2 mA or lower, ON current 2 mA (for 24 V)
	Inputs	6 inputs (IN1 to IN6)
	Function	IN1: External trigger, IN2 to IN6: Enable by assigning the optional functions Assignable functions: Program switching, Clear error, External master image registration
Output	Type	Open collector output NPN/PNP is switchable, N.O./N.C. is switchable For open collector NPN output: Maximum rating 26.4 V 50 mA, remaining voltage 1.5 V or lower

		For open collector PNP output: Maximum rating 26.4 V 50 mA, remaining voltage 2 V or lower
	Outputs	4 outputs (OUT1 to OUT4)
	Function	Enable by assigning the optional functions Assignable functions: Total judge result, RUN, BUSY, Error, Position adjustment result, Judge result of each tool, Result of the logical operation of each tool
Ethernet	Standard	100BASE-TX/10BASE-T <sup>*10</sup>
	Connector	M12 4pin connector <sup>*10</sup>
Network function		FTP client, EtherNet/IP®, PROFINET
Rating	Power voltage	24 VDC ±10 % (including ripple)
	Current consumption	0.6 A or less
Environmental resistance	Enclosure rating	IP67 <sup>*11</sup>
	Ambient temperature	0 to +50 °C 32 to 122 °F (No freezing)
	Relative humidity	35 to 85 % RH (No condensation)
	Vibration resistance	10 to 55 Hz, Double amplitude 1.5 mm 0.06", 2 hours in each of the X, Y, and Z directions <sup>*12</sup>
	Shock resistance	500 m/s <sup>2</sup> , 3 times in each of 6 directions <sup>*12</sup>
Material		Main unit case: Aluminium die-casting, Packing: NBR, Front cover: Acrylic, Mounting adapter: POM
Weight		Approx. 270 g

<sup>\*1</sup> The focusing position can be automatically adjusted at the time of installation. Deactivated during the operation. Focusing position can be registered by program.

<sup>\*2</sup> Color type only

<sup>\*3</sup> Possible with both the Color type and monochrome type

<sup>\*4</sup> Tools can be installed by programs.

<sup>\*5</sup> When using the FTP client function: 70 pictures

<sup>\*6</sup> Saves to the memory in the sensor. The images saved in the sensor can be backed up to the USB memory installed to the intelligent monitor (IV-M30) or to the PC by the software for IV (IV-H1).

<sup>\*7</sup> This can be displayed on the intelligent monitor (IV-M30) or by software for IV (IV-H1).

<sup>\*8</sup> Possible with both the color type and monochrome type

<sup>\*9</sup> Simulator can be used with the IV software (IV-H1).

<sup>\*10</sup> This is for connection with the intelligent monitor (IV-M30) or software for IV (IV-H1).

<sup>\*11</sup> Except when polarized filter attachment (OP-87436/OP-87437) is mounted

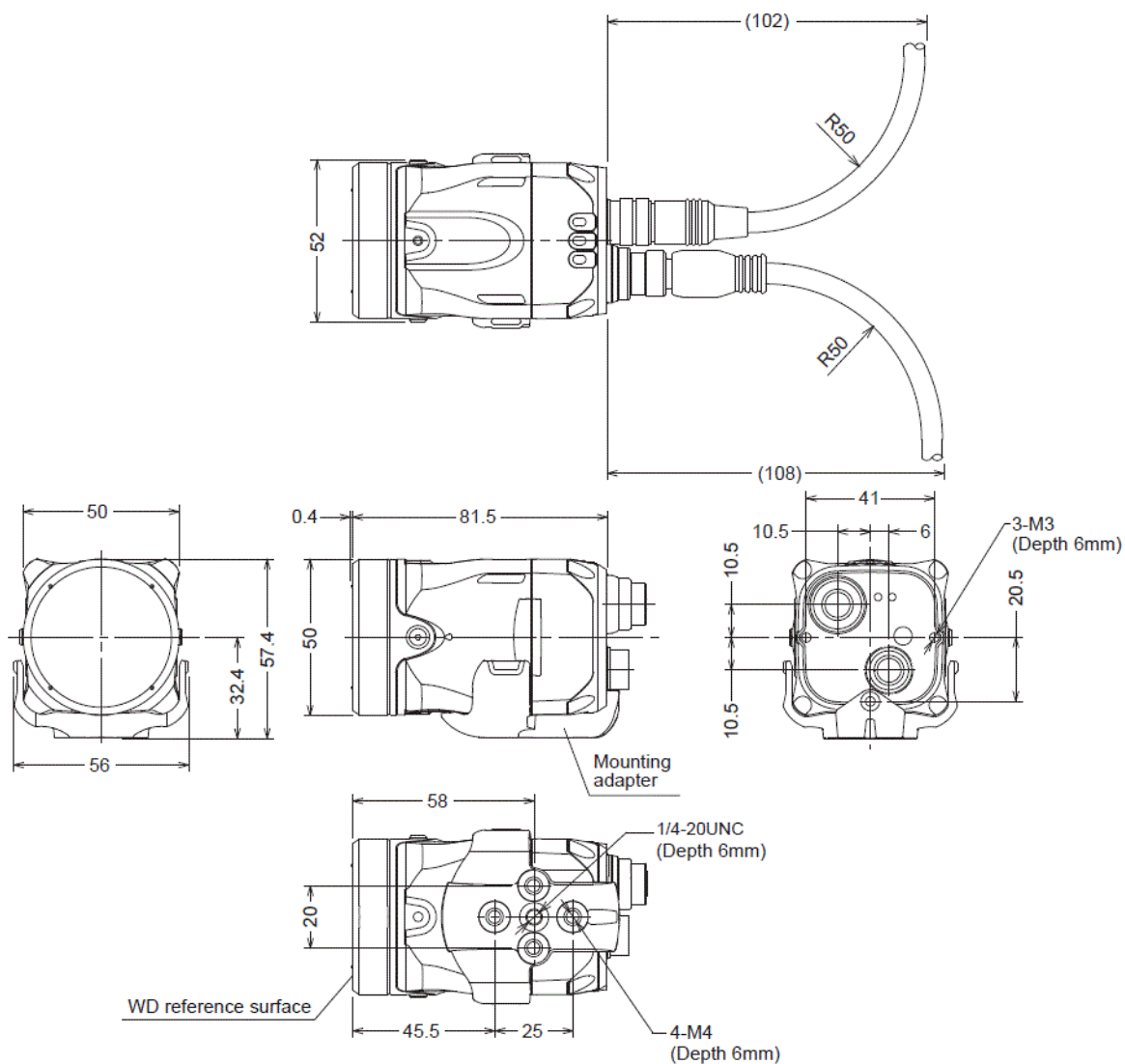
<sup>\*12</sup> Except when IV-G dome attachment (IV-D10) is mounted

# Dimensions

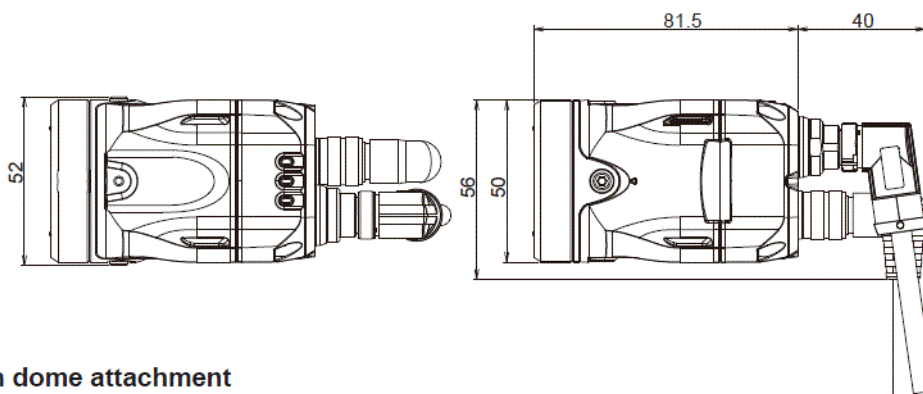
\* Download CAD file or product manual for larger image/text and more detail.

iv-500\_h500\_dimension\_01.gif

- IV-H500CA
- IV-H150MA
- IV-H500MA
- IV-H2000MA



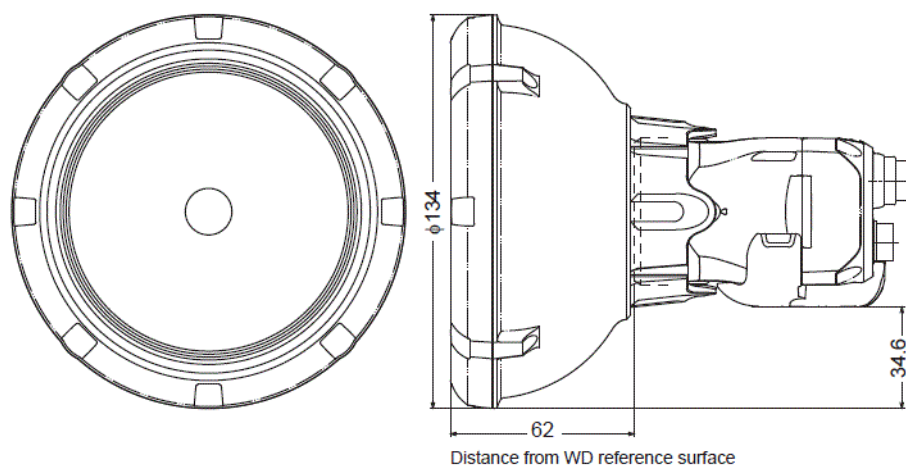
iv-500\_h500\_dimension\_02.gif



- With dome attachment

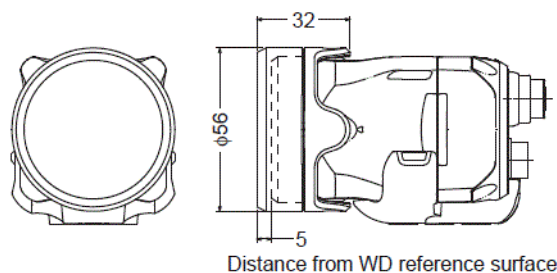
Installed distance: 0 to 50 mm from the front of the dome attachment

Compatible sensor: Standard range type/Short range type



Distance from WD reference surface

- With polarizing filter attachment



Distance from WD reference surface