

3.1.5 In-Sight 5604 Line Scan Vision System Specifications

Table 3-7: 5604 Vision System Specifications

Specification		In-Sight 5604
Minimum Firmware Requirement		In-Sight version 4.3.0
Memory	Job/Program	64MB non-volatile flash memory; unlimited storage via remote network device.
	Image Processing	128MB
Image	Sensor	1-inch CCD
	Sensor Properties	14.3 mm x 14µm active area, 14µm x 14µm sq. pixels.
	Resolution (pixels)	1024 x 1 (CCD); 1024 x 2048 (up to 2048 lines for full resolution image).
	Acquisition	Line Scan integration.
		256 grey levels (8 bits/pixel).
		Gain/Offset controlled by software.
		44K lines per second. ¹
	Lens Type	C-mount
	CCD Alignment Variability ²	±0.127mm (0.005in), (both x and y) from lens C-mount axis to center of imager.
I/O	Trigger	1 opto-isolated, acquisition trigger input.
		Remote software commands via Ethernet and RS-232C.
	Discrete Inputs	None built-in. Additional inputs available using a compatible I/O module (see Table 1-3). Unlimited inputs when using an Ethernet I/O system.
	Discrete Outputs	2 built-in, high-speed outputs. Additional outputs available using a compatible I/O module (see Table 1-3). Unlimited outputs when using an Ethernet I/O system.
	Encoder Inputs	2 built-in, encoder inputs for use with a 24V signal.
	Status LEDs	Power, Network Status, Network Traffic, 2 user configurable.
Communications	Network	1 Ethernet port, 10/100 BaseT, TCP/IP protocol. Supports DHCP (factory default) or static IP address.
	Serial	RS-232C when connected to an optional CIO-MICRO OR CIO-MICRO-CC I/O module.
Power		24VDC ±10%, 350mA maximum.
Mechanical	Material	Die-cast aluminum housing.
	Finish	Painted/Powder coat (back plate).
	Mounting	Eight M4 threaded mounting holes (four front and four back).
	Dimensions	53.2mm (1.50in) x 124.1mm (4.88in) x 61.4mm (2.42in)
	Weight	454 g (16 oz.) protective lens cap installed, without lens.
Environmental	Temperature	Operating – non-circulating air ³ : 0°C to 45°C (32°F to 113°F)
		Operating – circulating air ⁴ : 0°C to 50°C (32°F to 122°F)
		Storage: –30°C to 80°C (22°F to 176°F)
	Humidity	95%, non-condensing (Operating and Storage)
	Protection	For environments where protection is required, use an optional protective enclosure.
	Shock	80 G Shock with 150 gram lens attached per IEC 68-2-27.
	Vibration	10 G from 10-500 Hz with 150 gram lens per IEC 68-2-6.

Table 3-7: 5604 Vision System Specifications (Cont.)

Specification	In-Sight 5604
Regulatory Compliance	CE, UL, CUL, FCC, RoHS

1. Maximum lines per second are based on the minimum exposure.
2. Expected variability in the physical position of the CCD, from vision system-to-vision system. This equates to ~ ±8 pixels on a 2024 x 1 resolution CCD.
3. The vision system should be mounted with sufficient clearance on all sides to allow air circulation around and through the cooling posts on the black heat sink. If the vision system is not mounted with sufficient clearance, a fan is recommended.
4. Additional cooling from a fan is required for operation above 40°C. For operation up to 50°C, there must be ≥4 CFM of air moving through the cooling posts on the black heat sink.

3.3.8 5604 Vision System Dimensions

Notes:	• All dimensions are in millimeters [inches] and are for reference purposes only.
	• All specifications may be changed without notice.

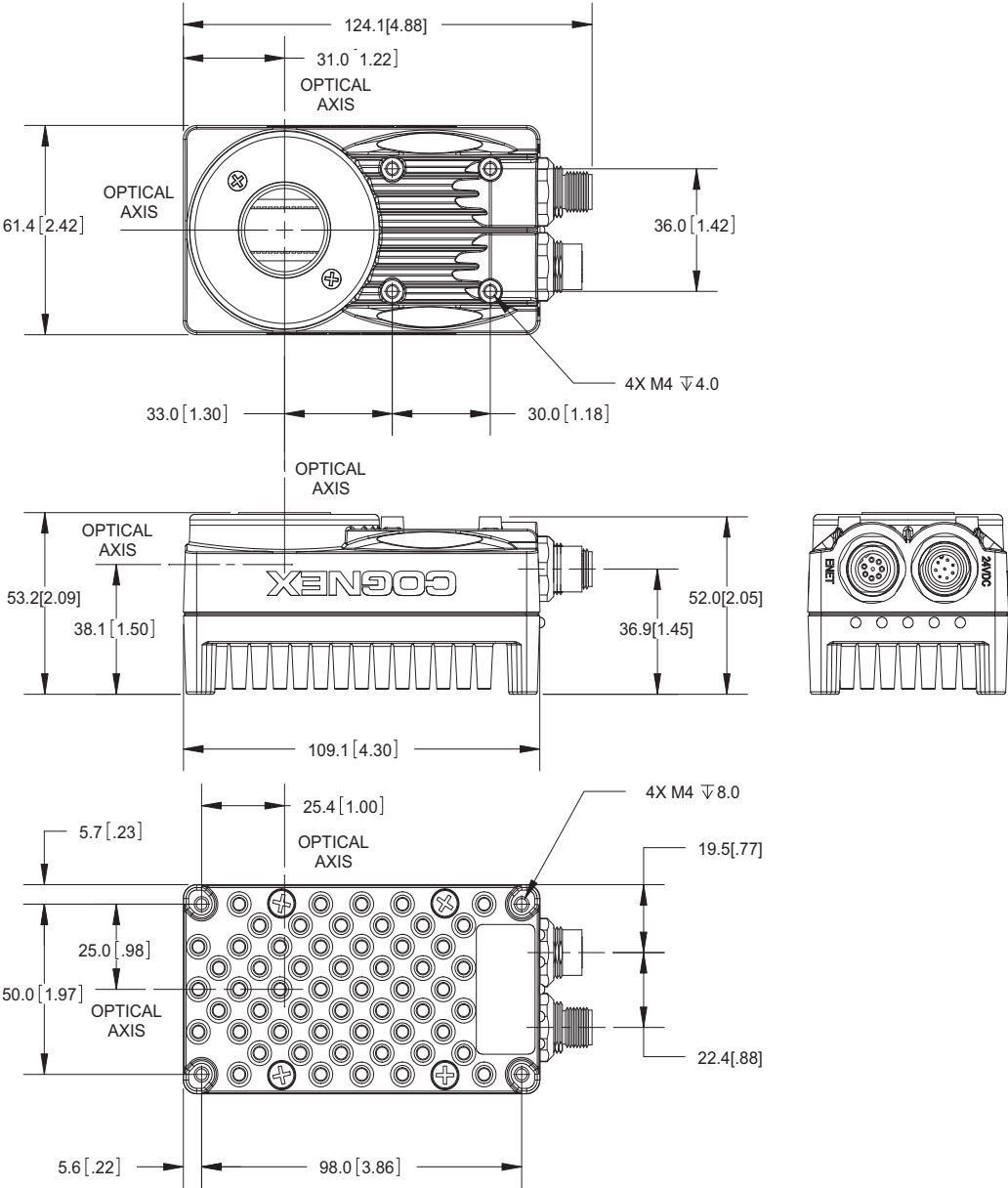


Figure 3-16: 5604 Vision System Dimensions