COGNEX

In-Sight® 2800 Series

Reference Manual

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Symbols

The following symbols indicate safety precautions and supplemental information:

WARNING: This symbol indicates a hazard that could cause death, serious personal injury or electrical shock.

CAUTION: This symbol indicates a hazard that could result in property damage.

Note: This symbol indicates additional information about a subject.

Tip: This symbol indicates suggestions and shortcuts that might not otherwise be apparent.

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Getting Started

This section provides general information about the In-Sight 2800 series vision system and the accessories and systems.

About the In-Sight 2800 Series

The In-Sight 2800 series vision systems are high-performance, easy hardware and software setup vision systems that offer:

- Premium class performance in a compact package
- Flexible Industry 4.0 connectivity options
- Unmatched Modularity and Ease of Use
- 1.6mp mono color and SVGA mono resolutions

Illumination Options for In-Sight 2800

The following illumination options are available for In-Sight 2800 vision systems:

- **Multi Torch**:

  The Multi Torch is a high-powered integrated multi-color light module with RED, GREEN, BLUE, and WHITE colors in a single package. The Multi Torch is compatible with vision system using 12 or 16 mm lens.

- **High Powered Illumination for 16 mm lens:**

  High-powered integrated light attachments are available in RED or WHITE color options for In-Sight 2800 Mini vision systems using a 16 mm lens.

- **Standard Illumination for 6.2 mm lens:**

  Integrated light attachments are available in RED, WHITE, BLUE, or IR options for In-Sight 2800 Mini vision systems using a 6.2 mm lens.

Accessories

You can purchase the following components separately. For a list of options and accessories, contact your local Cognex sales representative.

Lenses

Accessory	Product Number	Illustration
12mm Manual Focus Lens Module to be used with Multi Torch light	280-TORCH-MAN12	
16mm Manual Focus Lens Module to be used with Multi Torch light	280-TORCH-MAN16	
Blue bandpass filter supported with IS2800 Mini with 6.2mm lens illumination only	DM150-BP470	
Blue bandpass filter, 450nm	280-TORCH-BP635	
Red bandpass filter	DM150-BP635	
Red bandpass filter, 635nm	280-TORCH-BP450	

Illumination

Accessory	Product Number	Illustration
Red LED Light for 6.2 mm Lens (Risk Group Exempt acc. IEC 62471)	DM150-LED-RED	
White LED Light for 6.2 mm Lens (Risk Group Exempt acc. IEC 62471)	DM150-LED-WHT	
Blue LED Light for 6.2 mm Lens (Risk Group Exempt acc. IEC 62471)	DM150-LED-BLU	
High-Powered Red LED Light for 16 mm Lens (Risk Group Exempt acc. IEC 62471) For maximum light power 24VDC supply is recommended.	280-LED-REDHP	

⚠ **CAUTION**: 280-TORCH-MULTI devices equipped with a target aimer have been tested in accordance with IEC60825-1 3rd ed., 2014., and have been certified to be under the limits of a Class 2 Laser device.

LASER LIGHT- DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT 515nm <1mW
CLASSIFIED PER IEC 60825-1, Ed 3, 2014
Complies with 21 CFR 1040.10 and
1040.11 except for conformance with
IEC 60825-1 Ed. 3., as described in
Laser Notice No. 56, dated May 8, 2019

Lens Covers

Accessory	Product Number	Illustration
Front cover. Use with a 6.2 mm lens only.	DM280-CVR-62	
Polarized front cover. Use with a 6.2 mm lens only.	DM260-LENS-62CVR-F	
Extended front cover. Use with a 16 mm lens only.	DM260-LENS-16CVR	
Extended front cover, half-polarized. Use with a 16 mm lens only.	DM260-LENS-16CVR-P	
Extended front cover, fully-polarized. Use with a 16 mm lens only.	DM260-LENS-16CVR-F	
Cross-polarized cover for Multi Torch	280-TORCH-COVPOL	
Clear cover for Multi Torch	280-TORCH-COVCLR	
Diffuse cover for Multi Torch	280-TORCH-COVDIF	

⚠ **CAUTION**: For 280-TORCH-COVPOL, 280-TORCH-COVCLR, and 280-TORCH-COVDIF equipped with a Time-of-Flight sensor, the device has been tested to be under the limits of a Class 1 Laser device.

Mounting Brackets

Accessory	Product Number	Illustration
Universal mounting bracket	DM100-UBRK-000	
Pivot mounting bracket	DM100-PIVOTM-01	
Flat surface mounting plate adapter for Multi-Torch configuration	280-BKT-ADAPT	

Cables

Note: Cables are sold separately.

Accessory	Product Number	Illustration
Ethernet Cable, X-coded M12-8 to RJ-45	CCB-84901-2001-xx (straight, xx specifies length: 2m, 5m, 10m, 15m, 30m)	
Ethernet Cable, X-coded M12-8 to RJ-45	CCB-84901-2002-xx (right-angled, xx specifies length: 2m, 5m, 10m)	
Ethernet Cable, Robotic X-Coded M12-8 to RJ-45	CCB-84901-2RBT-xx (straight, xx specifies length: 2m, 5m, 10m)	
X-Coded to A-Coded Ethernet cable adapter, 0.5 m	CCB-M12X8MS-XCAC	
Power and I/O Breakout Cable, M12-12 to Flying Lead	CCB-PWRIO- xx (straight, xx specifies length: 5m, 10m, 15m)	
Power and I/O Breakout Cable, M12-12 to Flying Lead	CCB-PWRIO-xxR (right-angled, xx specifies length: 5m, 10m, 15m)	
I/O Module Cable M12-12 to DB15	CCB-PWRIO-MOD-xx (xx specifies length: 2m, 5m)	
RS-232 Connection Cable	CCB-M12xDB9Y-05	
I/O Extension Cable	CKR-200-CBL-EXT	

Support

Many information resources are available to help you use the vision system:

- The *EasyBuilder Help* file, provided with the In-Sight software.
- On-demand training: cognex.com/on-demand-training.aspx.
- The In-Sight online support site: cognex.com/support/insight.

Note: For the latest documentation, visit: support.cognex.com/documentation/in-sight.

Setting Up Your In-Sight Vision System

Read this section to learn how the vision system connects to its standard components and accessories.

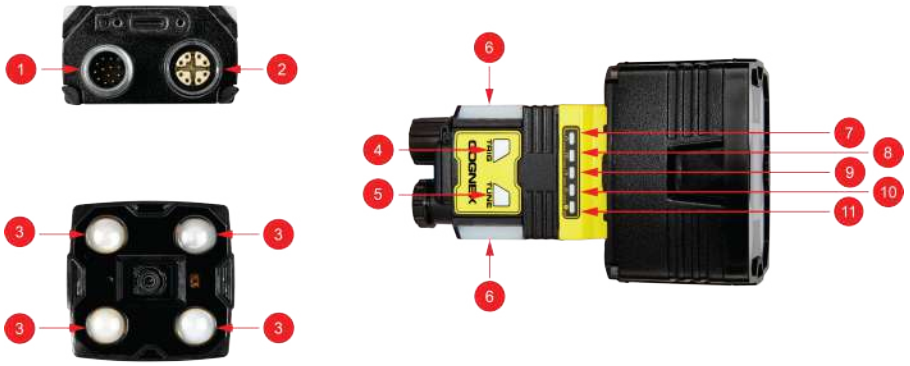
Note:

- Cables are sold separately.
- If a standard component is missing or damaged, immediately contact your Cognex Authorized Service Provider (ASP) or Cognex Technical Support.

CAUTION: All cable connectors are keyed to fit the connectors on the vision system. Do not force the connections or damage may occur.

Vision System Layout

The image and table below shows the elements of the vision system.



Number	Description
1	Power I/O Breakout cable connector
2	Ethernet connector
3	Illumination LEDs
4	Trigger button **Note**: The Trigger Button is not supported.
5	Tune button **Note**: The Tune Button is not supported.
6	Indicator LEDs
7	Power LED indicator
8	Train status/Trigger status LED indicator
9	Good/bad inspection LED indicator
10	Communication LED indicator
11	Error LED indicator

Dimensions

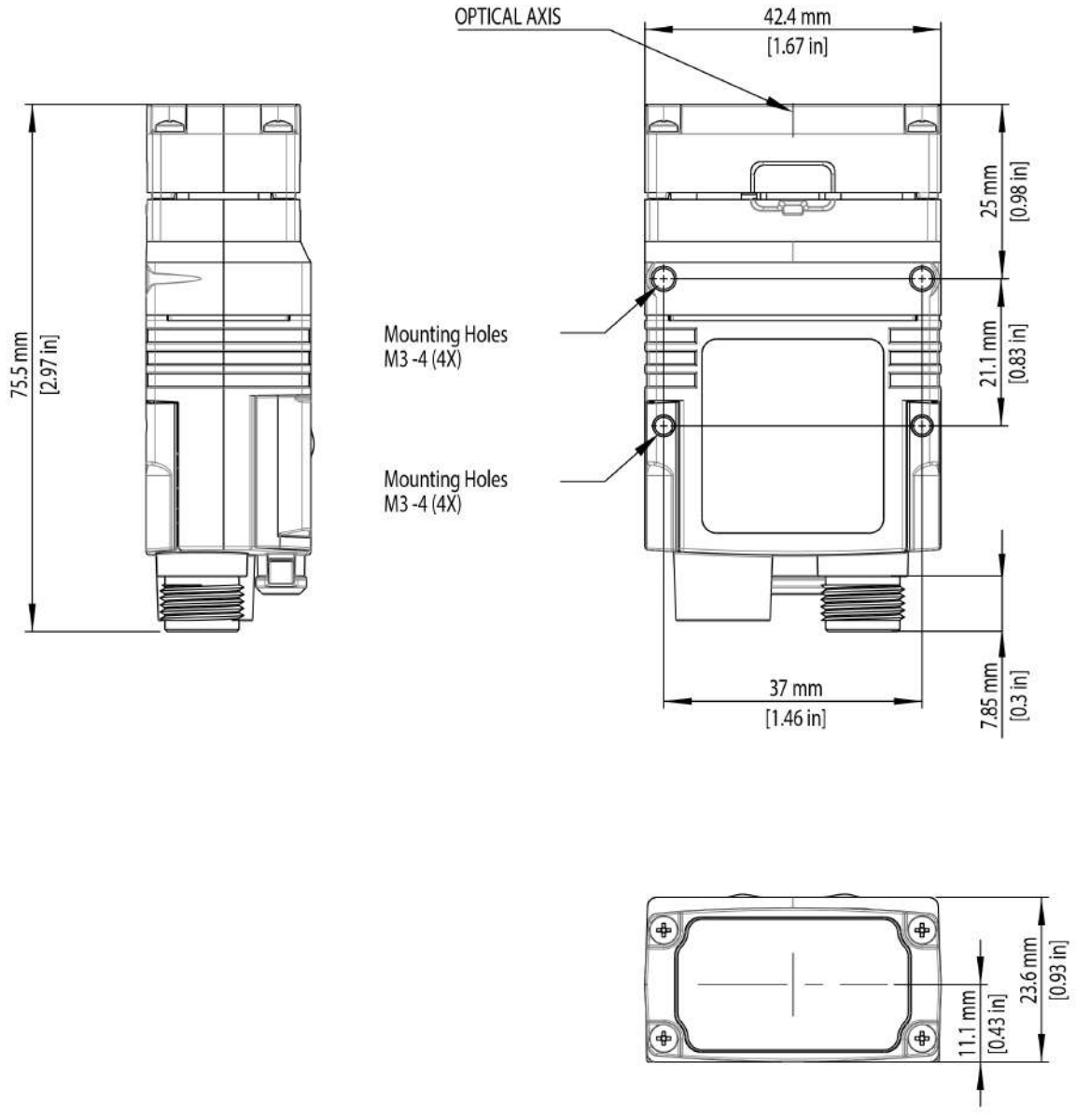
The following sections list dimensions of the vision system.

Note:

- Dimensions are in millimeters and are for reference purposes only.
- All specifications are for reference purposes only and can change without notice.

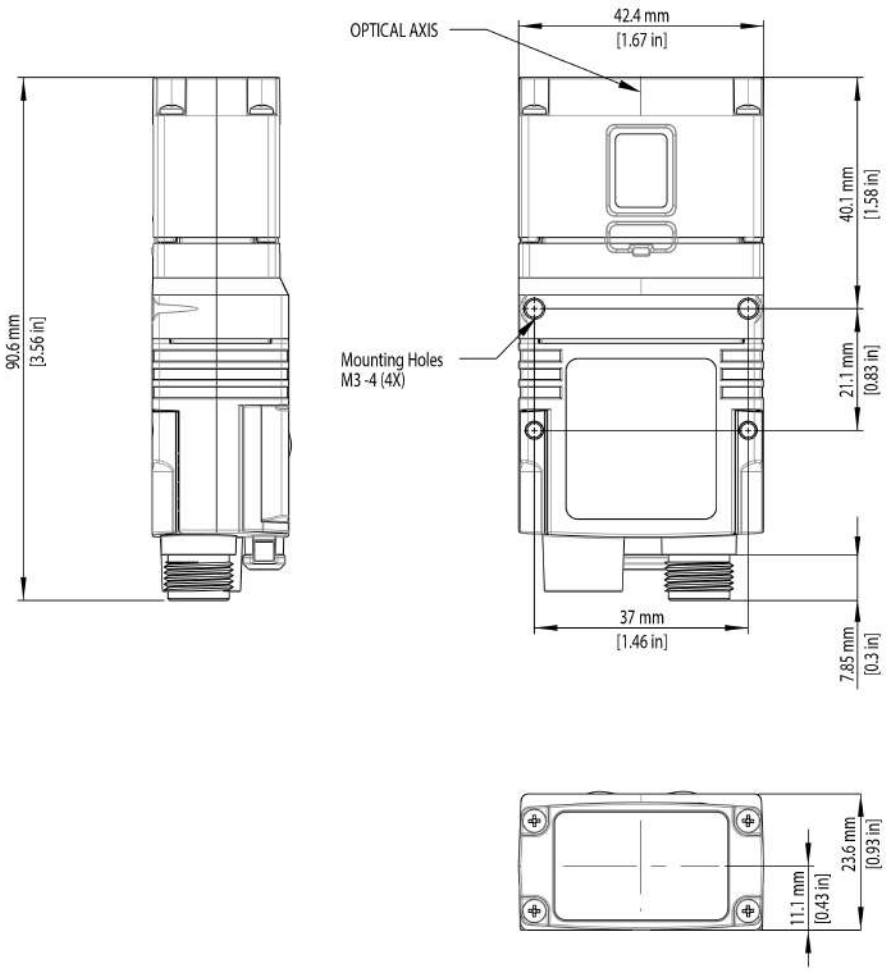
In-Sight 2800 Mini with 6.2 mm lens

The following image shows the dimensions of In-Sight 2800, equipped with 6.2 mm lens.



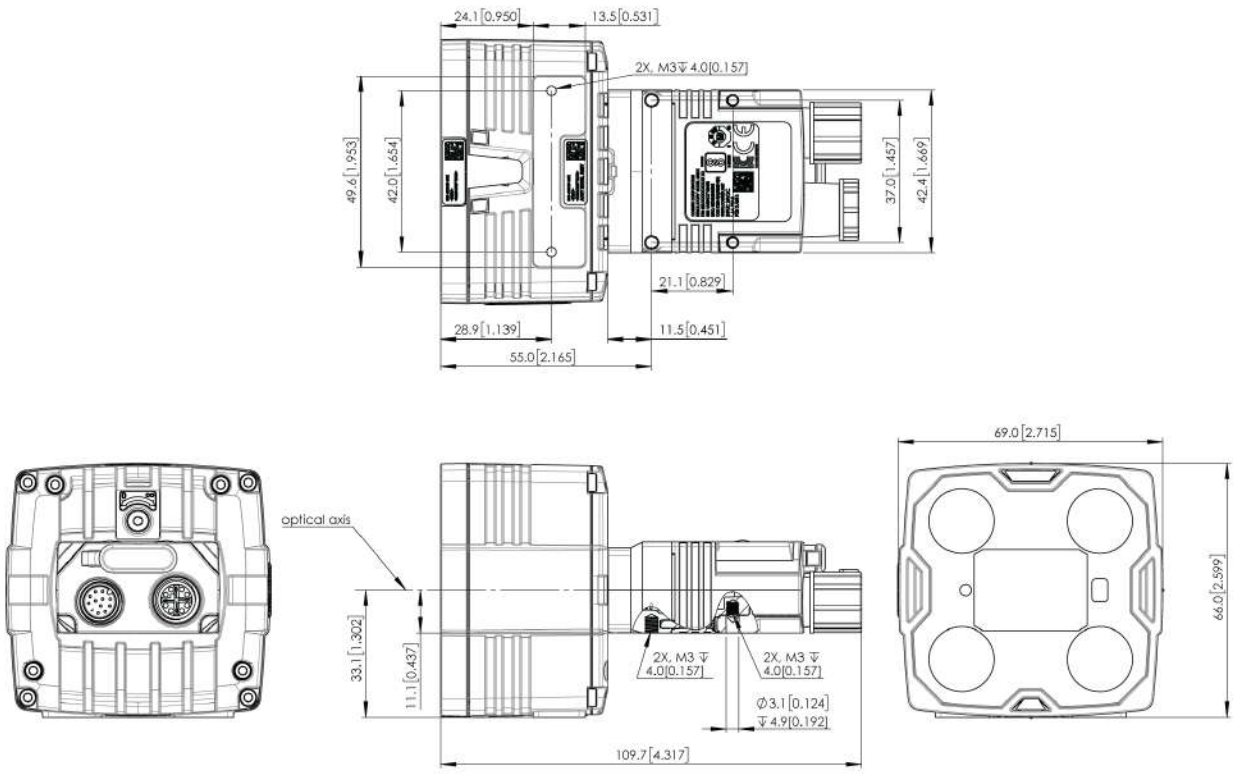
In-Sight 2800 Mini with 16 mm Lens

The following image shows the dimensions of In-Sight 2800 equipped with 16 mm lens.



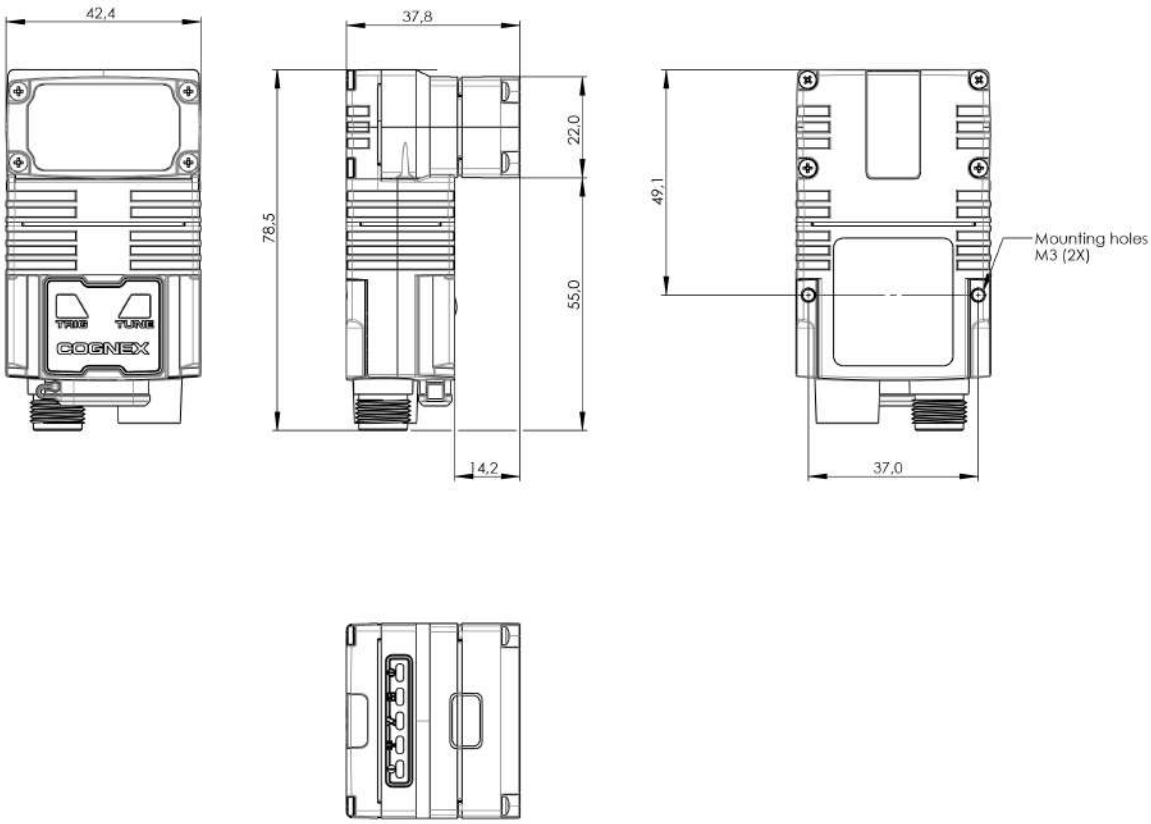
In-Sight 2800 with Multi Torch

The following image shows the dimensions of In-Sight 2800 equipped with Multi Torch.



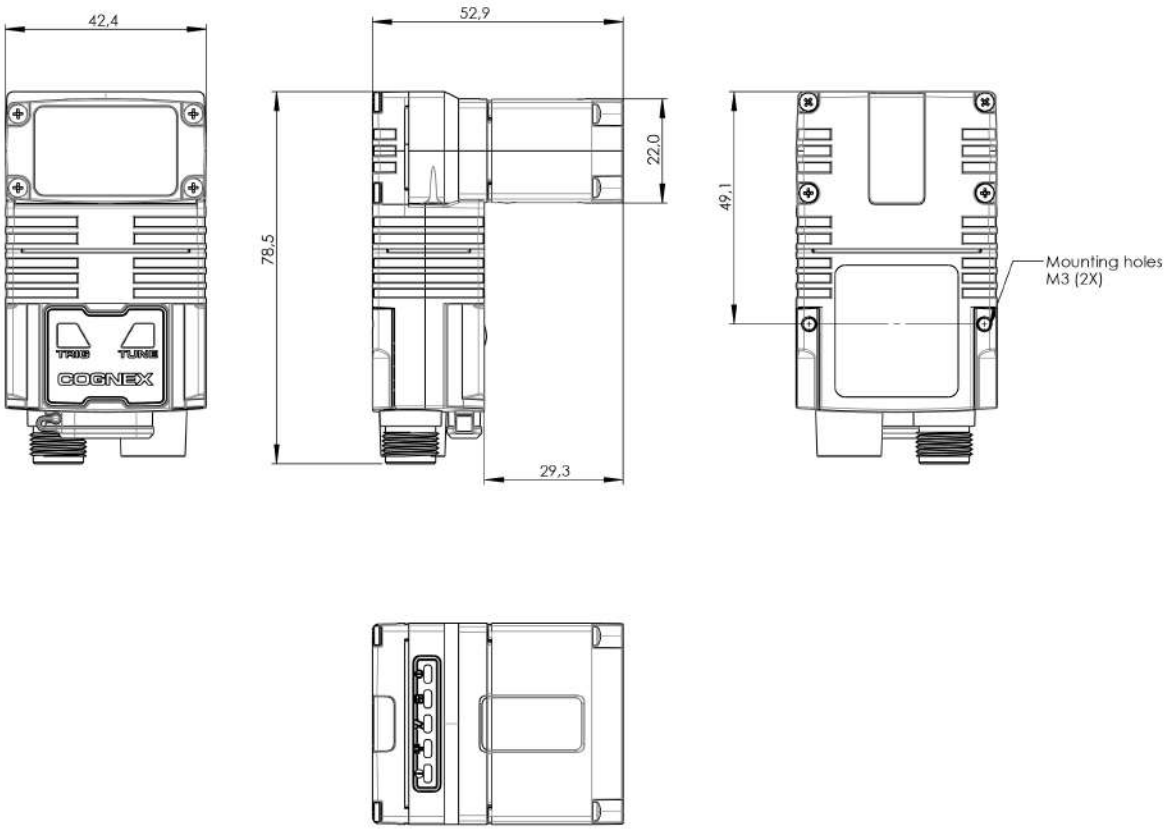
In-Sight 2800 Mini with 6.2 mm Lens - Right Angle Configuration

The following image shows the dimensions of In-Sight 2800 equipped with L-shaped extension and 6.2 mm lens.



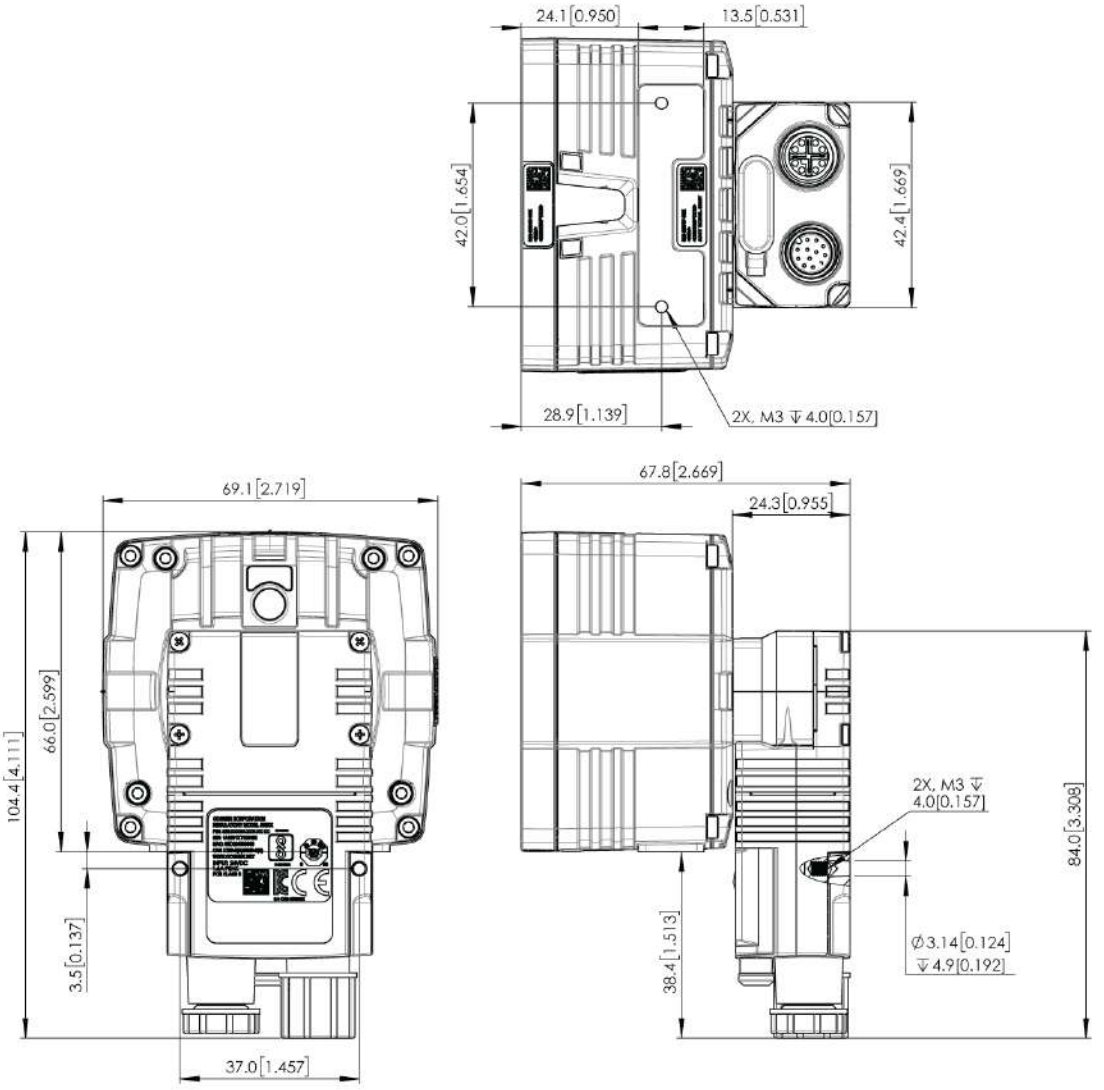
In-Sight 2800 Mini with 16 mm Lens - Right Angle Configuration

The following image shows the dimensions of In-Sight 2800 equipped with L-shaped extension and 16 mm lens.



In-Sight 2800 with Multi Torch - Right Angle Configuration

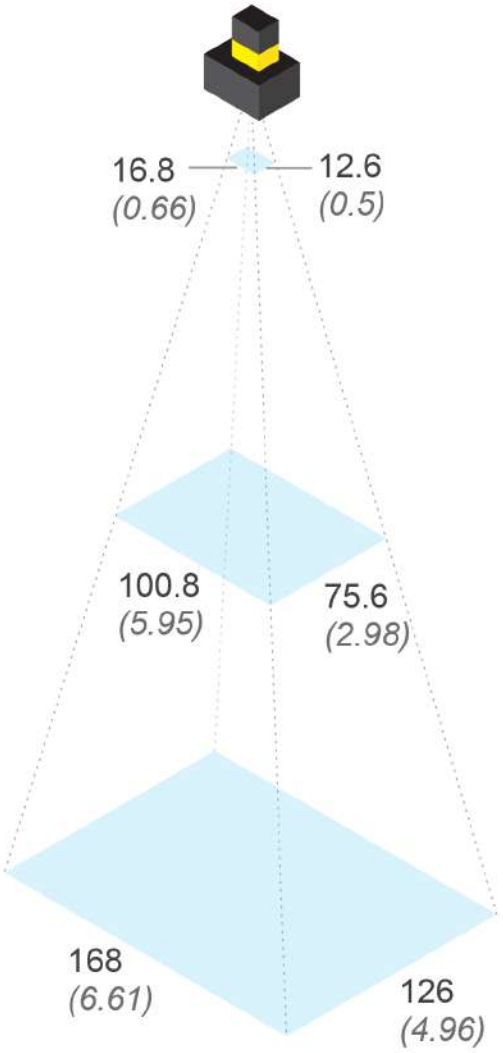
The following image shows the dimensions of In-Sight 2800 equipped with L-Shaped extension and Multi Torch.



Field of View and Working Distance

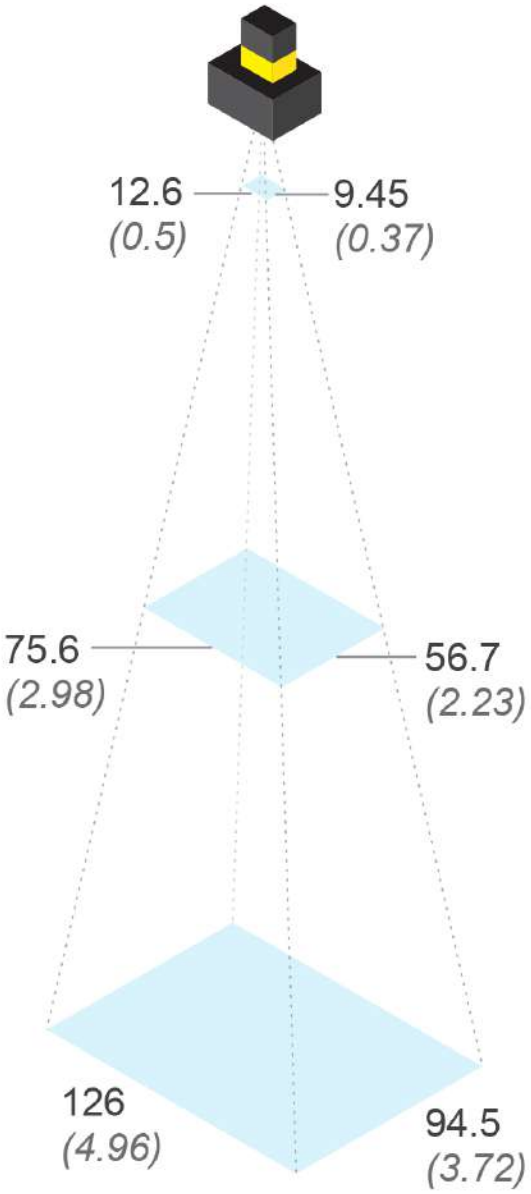
This section discusses the Field of View values for the IS2800 with Multi Torch and IS2800 Mini configurations. (*On the diagrams, the values at the top are in mm and the values at the bottom of the top values in the brackets are in inch*).

In-Sight 2800 with Multi Torch and 12 mm Lens



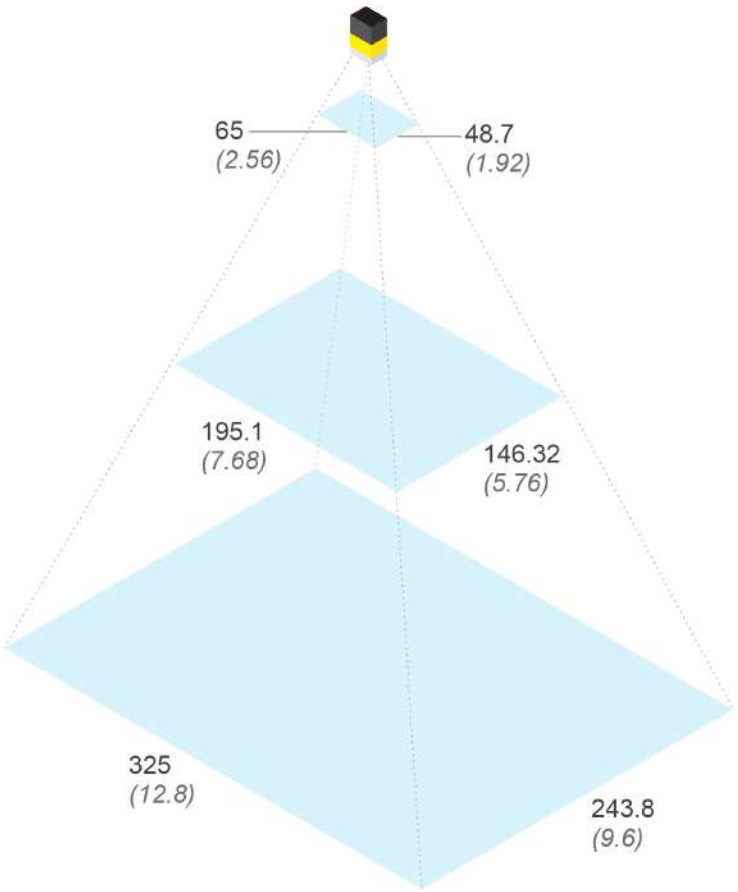
	Working Distance	Horizontal FOV	Vertical FOV
Minimum	50 mm (1.97 in)	16.8 mm (0.66 in)	12.6 mm (0.5 in)
Midpoint	300 mm (11.8 in)	100.8 mm (5.95 in)	75.6 mm (2.98 in)
Maximum	500 mm (19.69 in)	168 mm (6.61 in)	126 mm (4.96 in)

In-Sight 2800 with Multi Torch and 16 mm lens



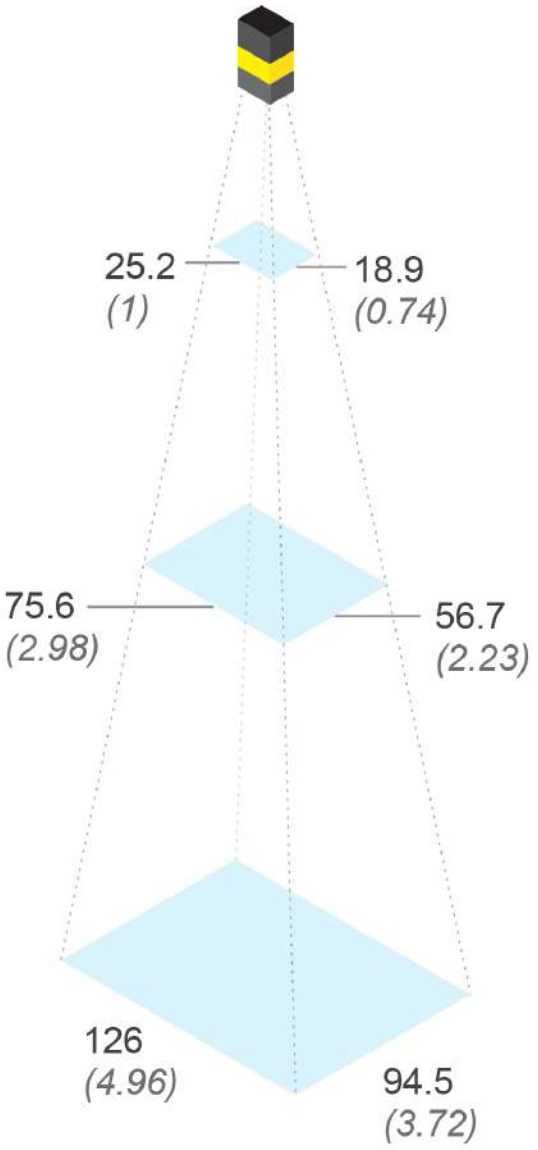
	Working Distance	Horizontal FOV	Vertical FOV
Minimum	50 mm (1.97 in)	12.6 mm (0.5 in)	9.45 mm (0.37 in)
Midpoint	300 mm (11.8 in)	75.6 mm (2.98 in)	56.7 mm (2.23 in)
Maximum	500 mm (19.69 in)	126 mm (4.96 in)	94.5 mm (3.72 in)

In-Sight 2800 Mini with 6.2 mm Lens



	Working Distance	Horizontal FOV	Vertical FOV
Minimum	50 mm (1.97 in)	65 mm (2.56 in)	48.7 mm (1.92 in)
Midpoint	300 mm (11.8 in)	195.1 mm (7.68 in)	146.3 mm (5.76 in)
Maximum	500 mm (19.69 in)	325 mm (12.8 in)	243.8 mm (9.60 in)

In-Sight 2800 Mini with 16 mm Lens



	Working Distance	Horizontal FOV	Vertical FOV
Minimum	100 mm (3.94 in)	25.2 mm (1 in)	18.9 mm (0.74 in)
Midpoint	300 mm (11.8 in)	75.6 mm (2.98 in)	56.7 mm (2.23 in)
Maximum	500 mm (19.69 in)	126 mm (4.96 in)	94.5 mm (3.72 in)

Installing and Changing Lenses

This section provides an overview about installing and changing different kinds of lenses.

- *Installing Manual Lens on Multi Torch* on page 24
- *Changing Front Cover on Multi Torch* on page 30

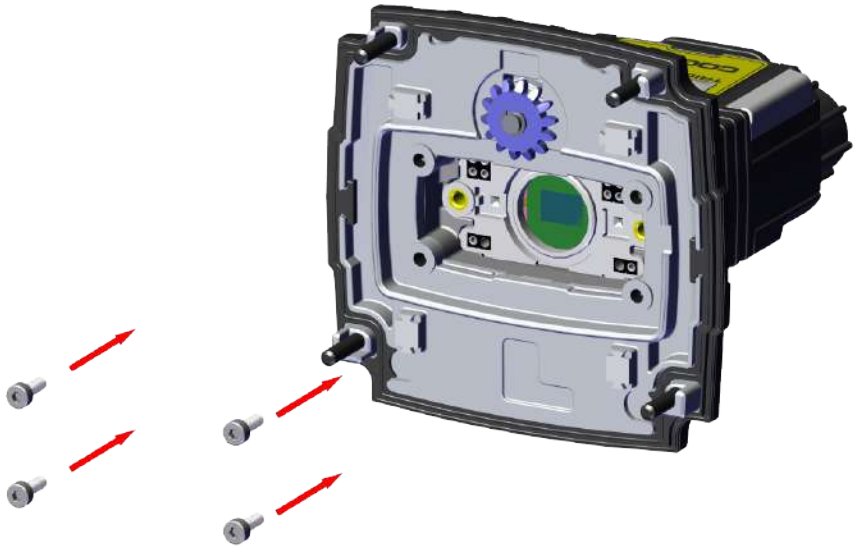
Note: Use a Phillips screwdriver with drive size #1 for all Phillips screws that are reachable from the front side.

Note: Disconnect the vision system from power before changing lenses or mounts.

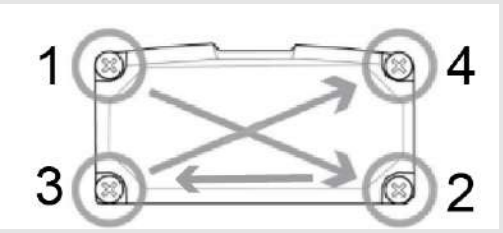
CAUTION: Perform all lens modification procedures in a dust-free and ESD safe area.

Installing Manual Lens on Multi Torch

1. Screw in the four screws from the adapter into the front of the housing.



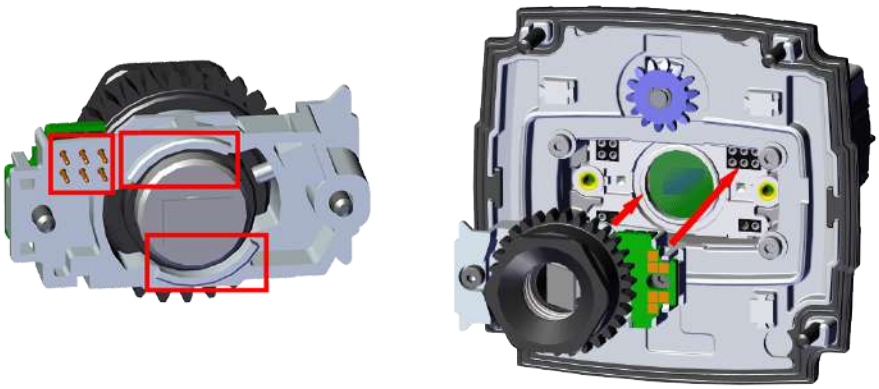
Note:
Observing the tightening sequence below, tighten all four M2 x 6 mm HSH screws to 0.25 Nm using a torque wrench.



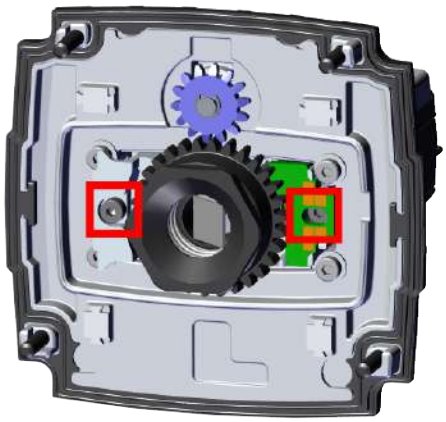
Note:
Make sure that the gasket is still present and flat between the adapter and the engine housing.

2. Install the manual lens subassembly to the unit.

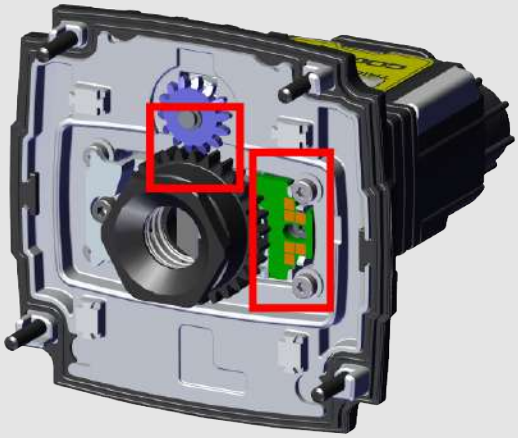
    a. Push the six pins into the designated holes of the adapter and align the cylindrical flange to the center of the unit.



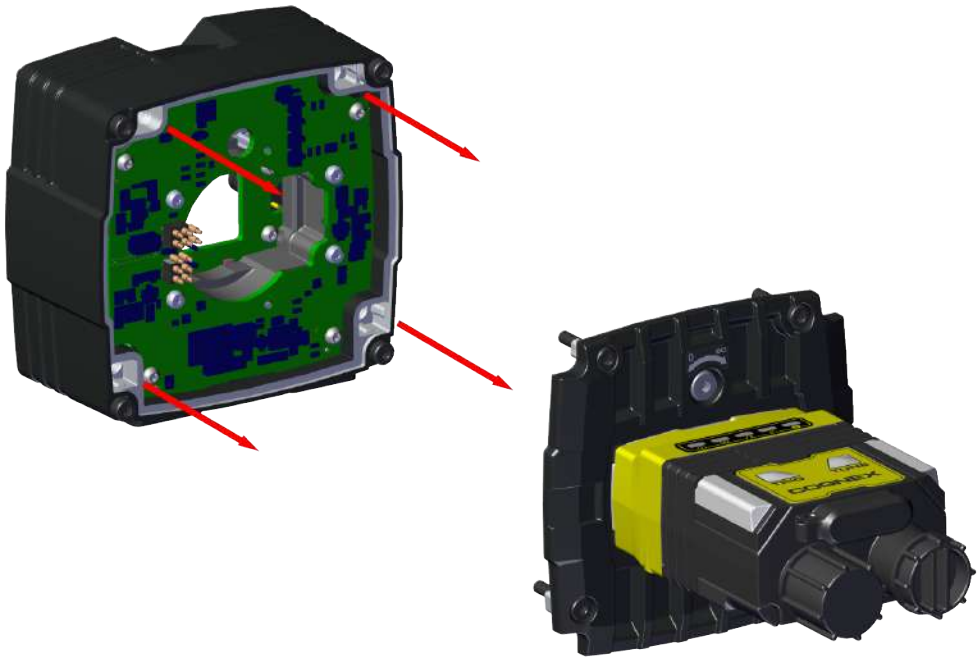
    b. Tighten the the M2 x 5 mm HSH screw halfway, then tighten the M2 x 12 mm HSH screw halfway as well. Continue screwing each screw incrementally, until tightening them to 0.4 Nm, using a torque wrench.



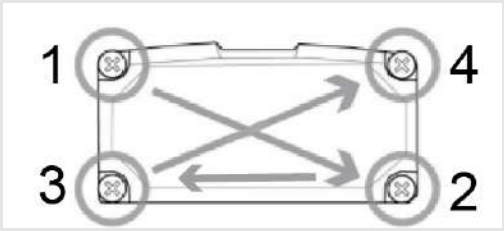
Note:
Make sure that the gear teeth mesh properly and that the contact pads are clean (free of dust and grease).



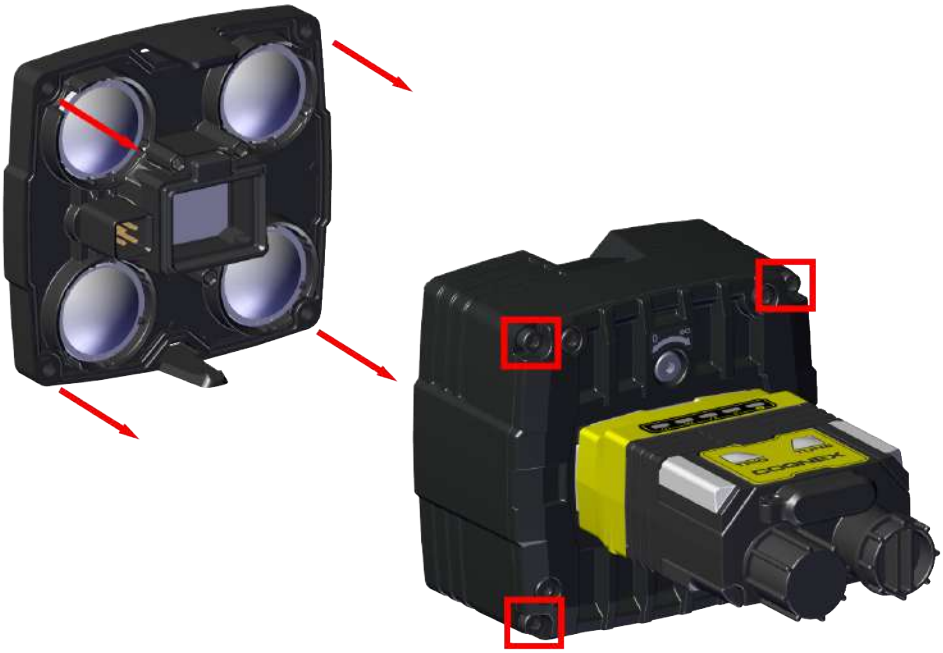
3. Screw in the four screws from the adapter into the back of the light module housing.



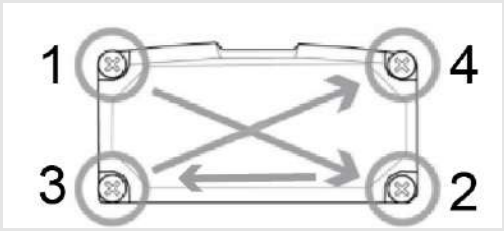
Note:
Observing the tightening sequence below, tighten all four M2.5 x 13 mm HSH screws to 0.25 Nm using a torque wrench.



4. Screw in the four screws from the light module into the front cover.

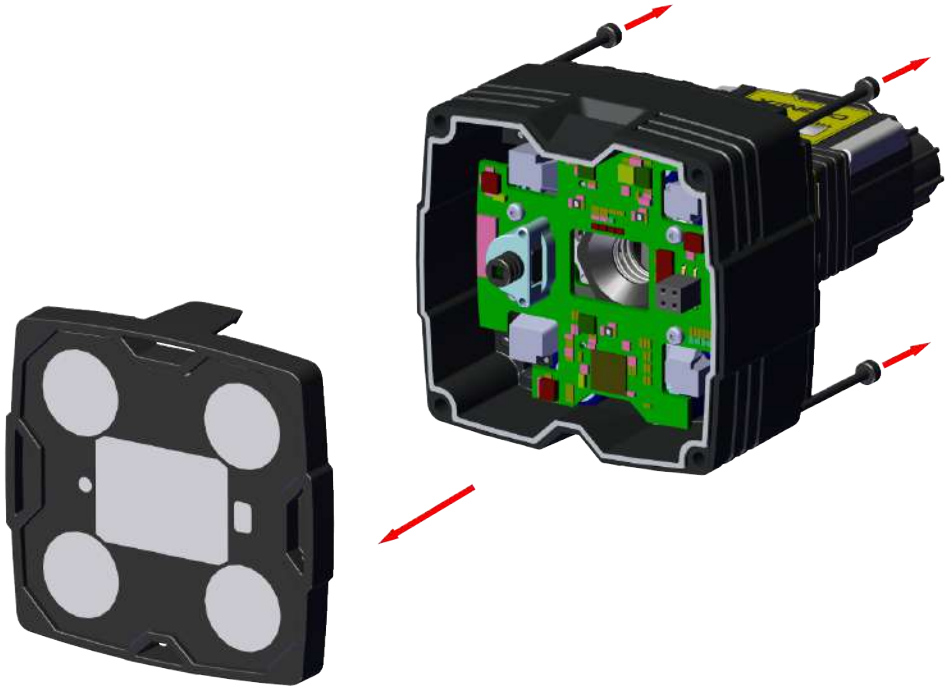


Note:
Observing the tightening sequence below, tighten all four M2.5 x 34 mm HSH screws to 0.25 Nm using a torque wrench.

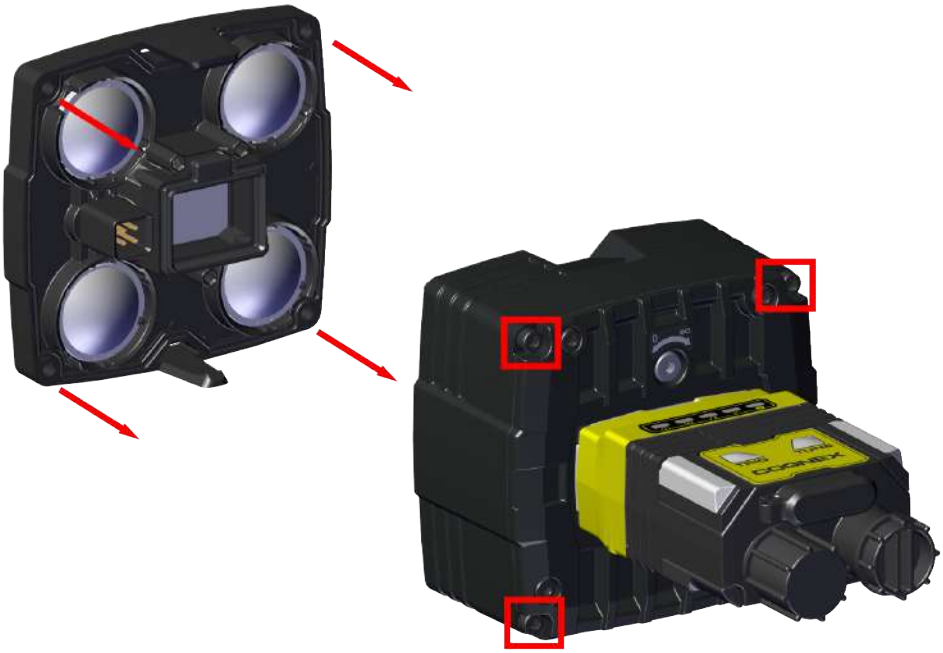


Changing Front Cover on Multi Torch

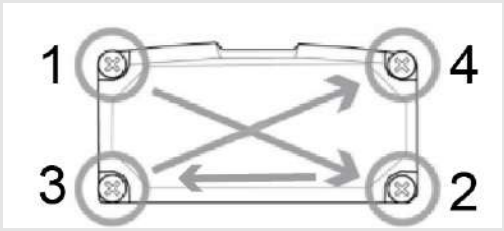
1. Unscrew the four screws from the light module, then take off the front cover from the light module.



2. Attach the new front cover and screw in the four screws into the front cover.



Note:
Observing the tightening sequence below, tighten all four M2.5 x 34 mm HSH screws to 0.25 Nm using a torque wrench.



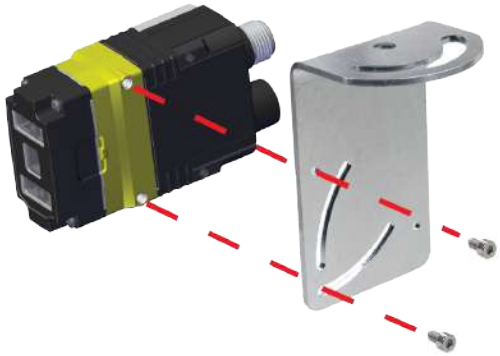
Connecting the Vision System

1	*Mounting the Vision System* on page 33
2	*Connecting the Ethernet Cable* on page 34
3	*Connecting the Power and I/O Breakout Cable* on page 35

Mounting the Vision System

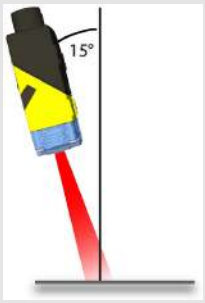
The vision system provides mounting holes for attachment to a mounting surface.

CAUTION: The vision system has to be grounded, either by mounting the vision system to a fixture that is electrically grounded or by attaching a wire from the vision system's mounting fixture to frame ground or Earth ground. If a ground wire is used, it has to be attached to one of the four mounting points on the back plate of the vision system and not to the mounting points on the front of the vision system.



Align the holes on the mounting surface with the mounting holes on the vision system. Insert the M3X3.5 screws into the mounting holes.

Note:
Mounting the In-Sight 2800 at a slight angle (15°) reduces reflections and improves performance of the vision system.



Connecting the Ethernet Cable

CAUTION: The Ethernet cable shield has to be grounded at the far end. Whatever this cable is plugged into (typically a switch or router) should have a grounded Ethernet connector. A digital voltmeter has to be used to validate the grounding. If the far end device is not grounded, a ground wire should be added in compliance with local electrical codes.

1. Connect the Ethernet cable's M12 connector to the vision system ENET connector.
2. Connect the Ethernet cable’s RJ-45 connector to a switch/router or PC, as applicable.

Note: Besides powering the vision system through a Breakout Cable, it is possible to power through PoE (Power over Ethernet) connection as well, in which case it is not necessary to use a Breakout Cable.
IS2800 Mini configurations support PoE connection. The Multi Torch configuration does not support PoE connection.

Connecting the Power and I/O Breakout Cable

CAUTION: To reduce emissions, connect the far end of the Breakout cable shield to frame ground.

Note:

- Perform wiring or adjustments to I/O devices when the vision system is not receiving power.
- You can clip unused wires short or use a tie made of non-conductive material to tie them back. Keep bare wires separated from the +24VDC wire.

1. Verify that the 24VDC power supply is unplugged and not receiving power.
2. Attach the Power and I/O Breakout cable's +24VDC and Ground wires to the corresponding terminals on the power supply. For more information, see *Specifications* on page 39.
3. Attach the Power and I/O Breakout Cable's M12 connector to the vision system's 24 VDC connector.
4. Restore power to the 24VDC power supply and turn it on if necessary.

Indicator LEDs

The table summarizes the functions of the In-Sight 2800's indicator LEDs.

Indicator	Color/Status	Meaning
User indicator LEDs	GREEN, blinking	Light edges blink in green when the device performs a good read. **Note**: In case of a good read, the Good/Bad read indicator LED is also blinking in green.
	RED, blinking	Light edges blink in red when the device performs a bad read when it does not find a decoding after a timeout. **Note**: In case of a bad read, the Good/Bad read indicator LED is also blinking in red.
	WHITE	Light edges are white when you trigger the Identify function in In-Sight. For more information, see In-Sight Reference Manual.
Power indicator LED	ON	The device is on.
	OFF	The device is off.
Train/Trigger status indicator LED	ON	If the device has a trained code, this LED is green.
	OFF	If the device has no trained code, this LED is off.
Good/Bad read indicator LED	GREEN, blinking	The device performs a good read. **Note**: In case of a good read, light edges are also blinking in green.
	RED, blinking	The device performs a bad read when it does not find a decoding after a timeout. **Note**: In case of a bad read, light edges are also blinking in red.
Communication	ON	This LED is on when the In-Sight 2800 established the Ethernet connection.
	OFF	This LED is off when there is no Ethernet connection.
Error	ON	This LED is on if the In-Sight 2800 detects an error.

Using Your In-Sight Vision System

This section provides information on the installation of the In-Sight, troubleshooting connection issues, tuning, image filtering, as well as vision system training and package detection.

Installing In-Sight Vision Suite

Follow the steps below to install and connect your vision system to the In-Sight Vision Suite.

1. Download the latest version of In-Sight Vision Suite from support.cognex.com/ and follow the on-screen steps.
2. Connect the 2800 series vision system to your PC.
3. Launch In-Sight Vision Suite and click **Refresh**.
4. Select a vision system from the list and click **Connect**.

Trigger Types

The In-Sight 2800 vision systems support the following trigger modes.

- **Self**: At a time interval you configure, the vision system acquires an image and runs the job on said image automatically.
- **Single** (external trigger): Acquires a single image and runs the current job on said image. The vision system relies on an external trigger source.

Industrial Protocols

The vision system supports the following industrial protocols:

- EtherNet/IP™, EDS and PLC
- PROFINET (Class B)
- SLMP Protocol
- TCP/IP
- OPC/UA
- FTP

For more information see **Industrial Communications** in In-Sight documentation.

Specifications

The following sections list general specifications for the vision system.

In-Sight 2800 Series Vision System

Specification	2800
Weight	6.2 mm: 141 g 16 mm: 169 g Right angle configuration adds 50 g
Power	24 VDC +/- 10%, USB 5V 500mA
24 V Supply	24VDC ± 10% LPS or NEC class 2
	Power consumption without USB device attached: • Average ≤ 5 W using High-Powered Light • Average ≤ 6 W using High Frequency High-Powered Light • Peak ≤ 1.6 A using internal illumination
Operating Temperature	0–40 °C (32–104 °F)
Storage Temperature	-10–60 °C (14–140 °F)
Humidity	<95% non-condensing
Environmental	IP67 **Note**: IP67 rating applies only if all blind plugs and cables are attached properly, or the provided connector plug is installed. Also make sure that the IP67-rated cover is installed properly.
Shock (Shipping and Storage)	IEC 60068-2-27: 1000 shocks, semi-sinusoidal, 11g, 10ms ISTA-1A Standardized Testing - Packaged Products 150lb or less
Vibration (Shipping and Storage)	IEC 60068-2-6: vibration test in each of the three main axis for 2 hours @ 10 Gs (10 to 500 Hz at 100m/s2 / 15mm) FedEx Vibration Testing for packaged products 150 lbs or less
RS-232	RxD, TxD according to TIA/EIA-232-F
High-Speed Outputs 0, 1, 2, 3	I_{MAX}: 50 mA
	V_{OL}: ≤ ± 3 V @ 50 mA
Inputs 0 (Trigger), 1, 2, 3	V_{IL}: ≤ ± 6 V
	V_{IH}: ≥ ± 12 V
	I_{TYP}: 4.2 mA @ 24 V
Ethernet	10/100/1000. Full duplex or half duplex.

In-Sight 2800 Series Vision System Image Sensor

Specification	Model
Image Sensor	1/3-inch CMOS, global shutter
Image Sensor Properties	Diagonal size: 6.17 mm Pixel size: 2.8 μm^2

Specification	Model
Image Resolution (pixels)	1440 x 1080 (1.6mp) 720x540 (SVGA)
Electronic Shutter Speed	Minimum exposure: 29 µs Maximum exposure: 10 ms (with internal illumination) Maximum exposure: 200 ms (with external illumination)
Image Acquisition at Full Resolution	Up to 45 Hz
Lens Type	Multi Torch: • Manual focus: 16 mm, 12 mm • Autofocus: 16 mm (High Speed Liquid Lens), 12 mm (High Speed Liquid Lens) IS2800 Mini: • Autofocus: 6.2 mm, 16 mm

LED and Laser Wavelengths

The following table shows LED types and the related peak wavelengths.

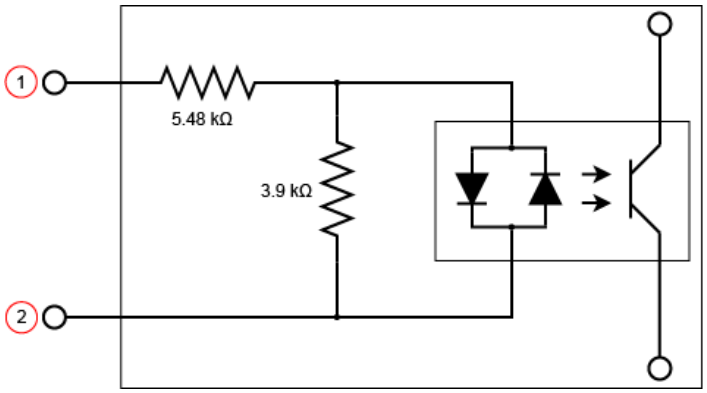
Model	LED	Wavelength
In-Sight 2800 Mini with 6.2mm Lens Illumination/with 16mm Lens and High Powered Illumination	White	Chromaticity coordinates acc. to CIE 1931 • Cx 0.34 (typ.) • Cy 0.33 (typ.)
	Blue	465 nm
	Red	617 nm
	IR	820 nm

In-Sight 2800 with Multi Torch Illumination	Multicolor	• 453 nm (blue)
		• 525 nm (green)
		• 625 nm (red)
		• Color temperature: 6740 Kelvin (white)
		Chromaticity coordinates acc. to CIE 1931
		  • Cx 0.31 (typ.)
		  • Cy 0.32 (typ.)

Acquisition Trigger Input

The vision system features one acquisition trigger input, which is optically isolated. You can configure the acquisition trigger input to trigger from an NPN (current sinking) or PNP (current sourcing) device.

- To trigger from an NPN type photoelectric sensor or PLC output, connect COMMON IN to +24 VDC and connect IN 0 to the output of the photoelectric sensor. When the output turns ON, it pulls TRIGGER down to 0 VDC, turning the opto-coupler ON.
- To trigger from a PNP photoelectric sensor or PLC output, connect IN 0 to the output of the photoelectric sensor and connect COMMON IN to 0 VDC. When the output turns ON, it pulls TRIGGER up to +24 VDC, turning the opto-coupler ON.

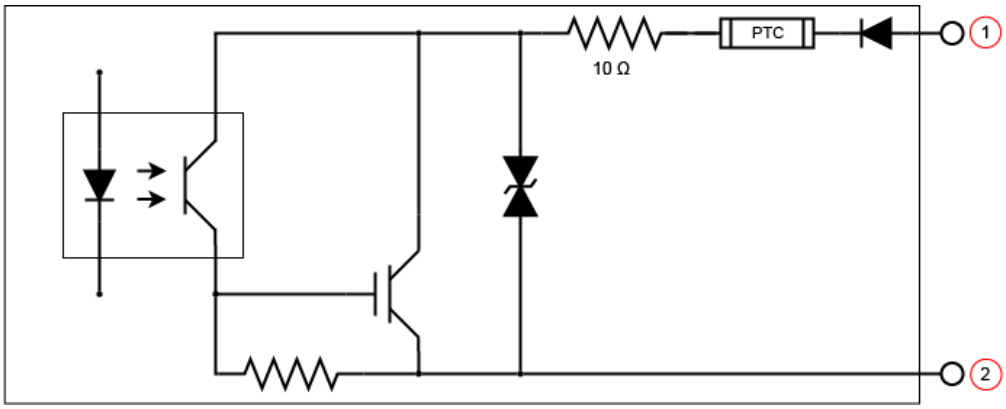


Number	Input
1	**IN 0**
2	**COMMON IN**

High-Speed Outputs

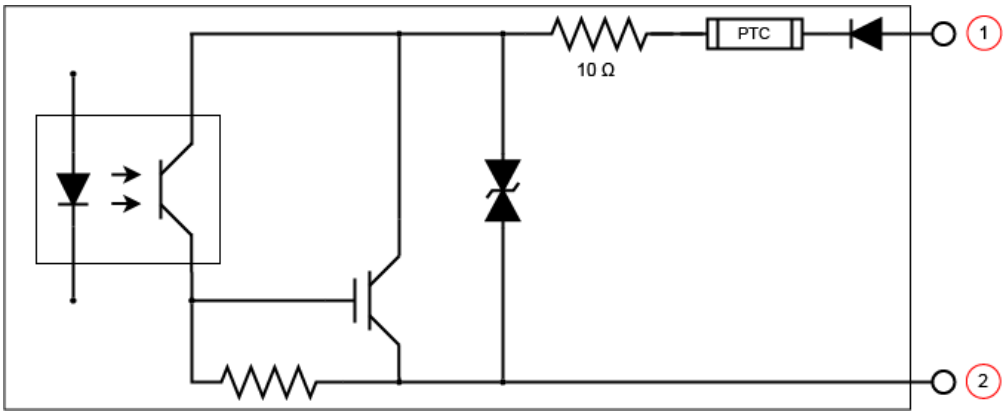
Specification	Description
Voltages	V_{MAX}: 26 VDC through external load V_{OL}: ≤ ± 3 V @ 50 mA
Current	I_{MAX}: 50 mA maximum sink or source current
	Each line is protected against over-current, short circuits and transients from switching inductive loads. High current inductive loads require an external protection diode.

For NPN lines, the external load should be connected between the output and the positive supply voltage (< 26 VDC). The output pulls down to less than 3 VDC when ON, which causes current to flow through the load. When the output is OFF, no current flows through the load.



Number	Output
1	**NPN OUT**
2	**COMMON OUT**

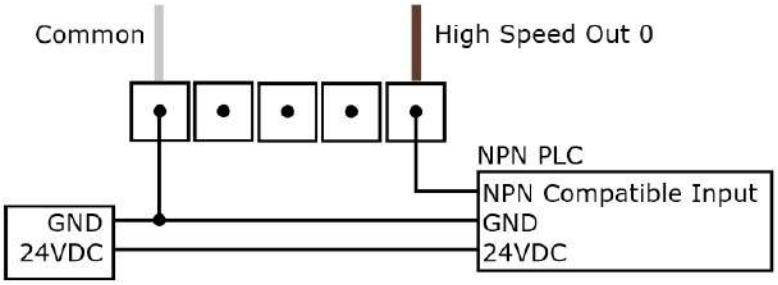
For PNP lines, the external load should be connected between the output and the negative supply voltage (0 VDC). When connected to a 24 VDC power supply, the output pulls up greater than 21 VDC when ON, and current flows through the load. When the output is OFF, no current flows through the load.



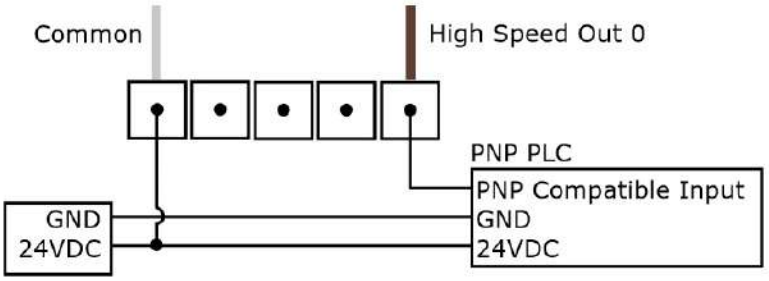
Number	Output
1	**COMMON OUT**
2	**PNP OUT**

High Speed Output Wiring

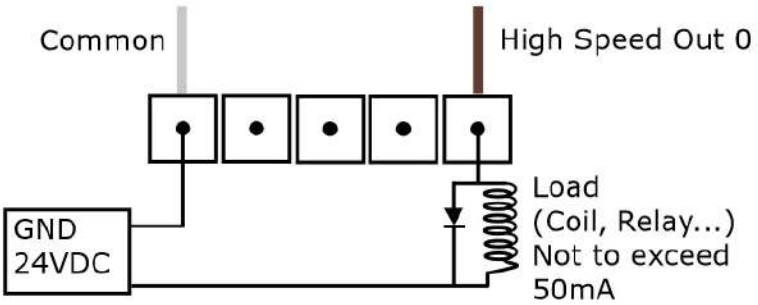
To connect to an NPN-compatible PLC input, connect one of the vision system's high-speed outputs directly to the PLC input. When enabled, the output pulls the PLC input down to less than 3 VDC.



To connect to a PNP-compatible PLC input, connect one of the vision system's high-speed outputs directly to the PLC input. When enabled, the output pulls the PLC input up to greater than 21 VDC.

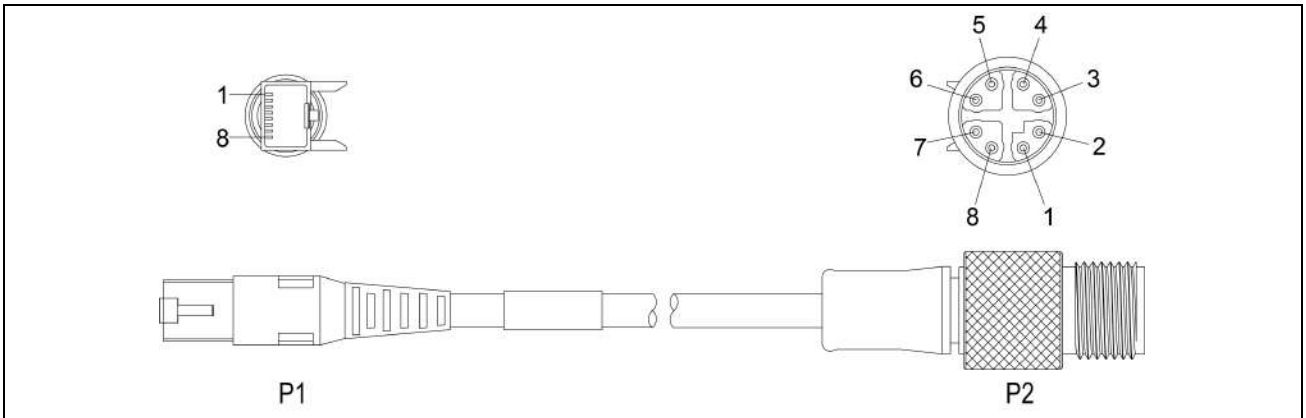


To connect the high-speed outputs to a relay, LED or similar load, connect the negative side of the load to the output and the positive side to +24VDC. When the output switches on, the negative side of the load is pulled down to less than 3 VDC, and 21 VDC appears across the load. Use a protection diode for a large inductive load, with the anode connected to the output and the cathode connected to +24 VDC.



Ethernet Cable

The Ethernet cable provides Ethernet connectivity to the vision system. The Ethernet cable is used to connect the vision system to other network devices.



P1 Pin Number	Wire Color	Signal Name	P2 Pin Number
1	White/Orange	TxRx A +	1
2	Orange	TxRx A -	2
3	White/Green	TxRx B +	3
4	Blue	TxRx C +	8
5	White/Blue	TxRx C -	7
6	Green	TxRx B -	4
7	White/Brown	TxRx D +	5
8	Brown	TxRx D -	6

CAUTION: The Ethernet cable shield has to be grounded at the far end. Whatever this cable is plugged into (typically a switch or router) should have a grounded Ethernet connector. A digital voltmeter has to be used to validate the grounding. If the far end device is not grounded, a ground wire should be added in compliance with local electrical codes.

Note:

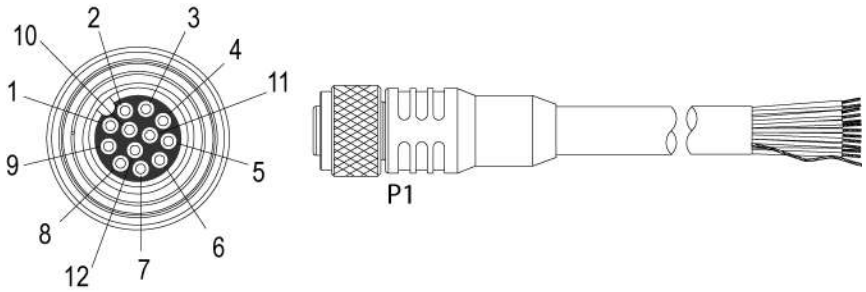
- Cables are sold separately.
- The wiring for this cable follows standard industrial Ethernet M12 specifications. It differs from the 568B standard.

Power and I/O Breakout Cable Specifications

CCB-PWRIO-05

The Power and I/O Breakout cable provides access to trigger and high-speed outputs. For RS-232, use the Power Supply return path for ground.

The figure on the left shows the plug on the device.



Pin#	Signal Names	Wire Color
1	Out 2/In 2	Yellow
2	TxD	White/Yellow
3	RxD	Brown
4	Out 3/In 3	White/Brown
5	In 1	Violet
6	Common In	White/Violet
7	+24 VDC	Red
8	GND	Black
9	Common Out	Green
10	In 0	Orange
11	Out 0	Blue
12	Out 1	Grey

Note:

- Cables are sold separately.
- Perform wiring or adjustments to I/O devices when the vision system is not receiving power.
- You can cut exposed wires short or trim wire ends. You also can tie the wires back if you use a tie made of non-conductive material. Keep bare wires separated from the +24VDC wire.

Cleaning and Maintenance

Clean the Housing

To clean the outside of the vision system housing, use a small amount of mild detergent cleaner or isopropyl alcohol on a cleaning cloth. Do not pour the cleaner on the vision system housing.

⚠ **CAUTION**: Do not attempt to clean any In-Sight product with harsh or corrosive solvents, including lye, methyl ethyl ketone (MEK) or gasoline.

Clean the Vision System Image Sensor Window

To remove dust from the outside of the image sensor window, use a pressurized air duster. The air must be free of oil, moisture or other contaminants that could remain on the glass and possibly degrade the image. Do not touch the glass window. If oil or smudges remain, use a cotton bud and alcohol (ethyl, methyl, or isopropyl) to clean the window. Do not pour the alcohol on the window.

Clean the Vision System Lens Cover

To remove dust from the lens cover, use a pressurized air duster. The air must be free of oil, moisture or other contaminants that could remain on the lens cover. To clean the plastic window of the lens cover, use a small amount of isopropyl alcohol on a cleaning cloth. Do not scratch the plastic window. Do not pour the alcohol on the plastic window.

Regulations and Conformity

Note: For the most current CE declaration and regulatory conformity information, see the Cognex support site: cognex.com/support.

In-Sight vision systems have Regulatory Model numbers 50208, 50210, 50215, 50216 and meet or exceed the requirements of all applicable standards organizations for safe operation. However, as with any electrical equipment, the best way to ensure safe operation is to operate them according to the agency guidelines that follow. Please read these guidelines carefully before using your device.

Safety and Regulatory	
Manufacturer	Cognex Corporation One Vision Drive Natick, MA 01760 USA
CE	In-Sight 2800 1.6 MP: Regulatory Model 50208 In-Sight2800 1.6 MP L-shaped: Regulatory Model 50210 In-Sight2800 2 MP: Regulatory Model 50215 In-Sight2800 2 MP L-shaped: Regulatory Model 50216 This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take immediate measures. This equipment complies with the essential requirements of the EU Directive 2014/30/EU. Declarations are available from your local representative.
EU RoHS	Compliant to the most recent applicable directive.
FCC	FCC Part 15, Class A This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
Korea KC	This device is certified for office use only and if used at home, there can be frequency interference problems. A급 기기(업무용 방송통신기자재): 이 기기는 업무용(A급) 전자파적합기기로서 판 매자 또는 사용자는 이 점을 주의하시기 바라 며, 가정외의 지역에서 사용하는 것을 목적으 로 합니다. In-Sight2800 1.6 MP: R-R-CGX-50208 In-Sight2800 1.6 MP L-shaped: R-R-CGX-50210 In-Sight2800 2 MP: R-R-CGX-50215 In-Sight2800 2 MP L-shaped: R-R-CGX-50216
TÜV	In-Sight2800 1.6 MP: Regulatory Model 50208 In-Sight2800 1.6 MP L-shaped: Regulatory Model 50210 In-Sight2800 2 MP: Regulatory Model 50215 In-Sight2800 2 MP L-shaped: Regulatory Model 50216
	NRTL: TÜV SÜD AM SCC/NRTL OSHA Scheme for UL/CAN 61010-1.
	CB report available upon request. TÜV SÜD AM, IEC/EN 61010-1.
UK	Regulatory Model 50208 Regulatory Model 50210 Regulatory Model 50215 Regulatory Model 50216

中国大陆RoHS (Information for China RoHS Compliance)

根据中国大陆《电子信息产品污染控制管理办法》(也称为中国大陆RoHS)，以下部份列出了本产品中可能包含的有毒有害物质或元素的名称和含量。

	Hazardous Substances 有害物质					
Part Name 部件名称	Lead (Pb) 铅	Mercury (Hg) 汞	Cadmium (Cd) 镉	Hexavalent Chromium (Cr (VI)) 六价铬	Polybrominated biphenyls (PBB) 多溴联苯	Polybrominated diphenyl ethers (PBDE) 多溴二苯醚
Regulatory Model 50208 Regulatory Model 50210 Regulatory Model 50215 Regulatory Model 50216	X	O	O	O	O	O

This table is prepared in accordance with the provisions of SJ/T 11364.
这个标签是根据SJ / T 11364 的规定准备的。

O: Indicates that said hazardous substance contained in all of the homogeneous materials for this part is below the limit requirement of GB / T26572 - 2011.
表示本部件所有均质材料中含有的有害物质低于GB / T26572 - 2011 的限量要求。

X: Indicates that said hazardous substance contained in at least one of the homogeneous materials used for this part is above the limit requirement of GB / T26572 - 2011.
表示用于本部件的至少一种均质材料中所含的危害物质超过GB / T26572 - 2011 的限制要求。

For European Community Users

Cognex complies with Directive 2012/19/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 July 2012 on waste electrical and electronic equipment (WEEE).

This product has required the extraction and use of natural resources for its production. It may contain hazardous substances that could impact health and the environment, if not properly disposed.

In order to avoid the dissemination of those substances in our environment and to diminish the pressure on the natural resources, we encourage you to use the appropriate take-back systems for product disposal. Those systems will reuse or recycle most of the materials of the product you are disposing in a sound way.

The crossed out wheeled bin symbol informs you that the product should not be disposed of along with municipal waste and invites you to use the appropriate separate take-back systems for product disposal.

If you need more information on the collection, reuse, and recycling systems, please contact your local or regional waste administration.

You may also contact your supplier for more information on the environmental performance of this product.

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