Extensive coverage and seamless deployments through advanced technology
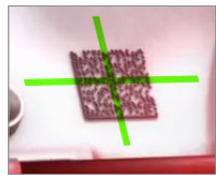
The DataMan 380 is embedded with leading image formation and decoding technology, ready to increase throughput and read rates out of the box. Modular lighting options maximize flexibility and simplify deployments.

High-Powered Integrated Torch (HPIT) maximizes scanning coverage and minimizes exposure times for greater throughput. Red and white lighting options illuminate codes in various lighting conditions.

C-mount lens and HSLL options maximize application coverage

High resolution sensors enable greater field-of-view and depth-of-field coverage
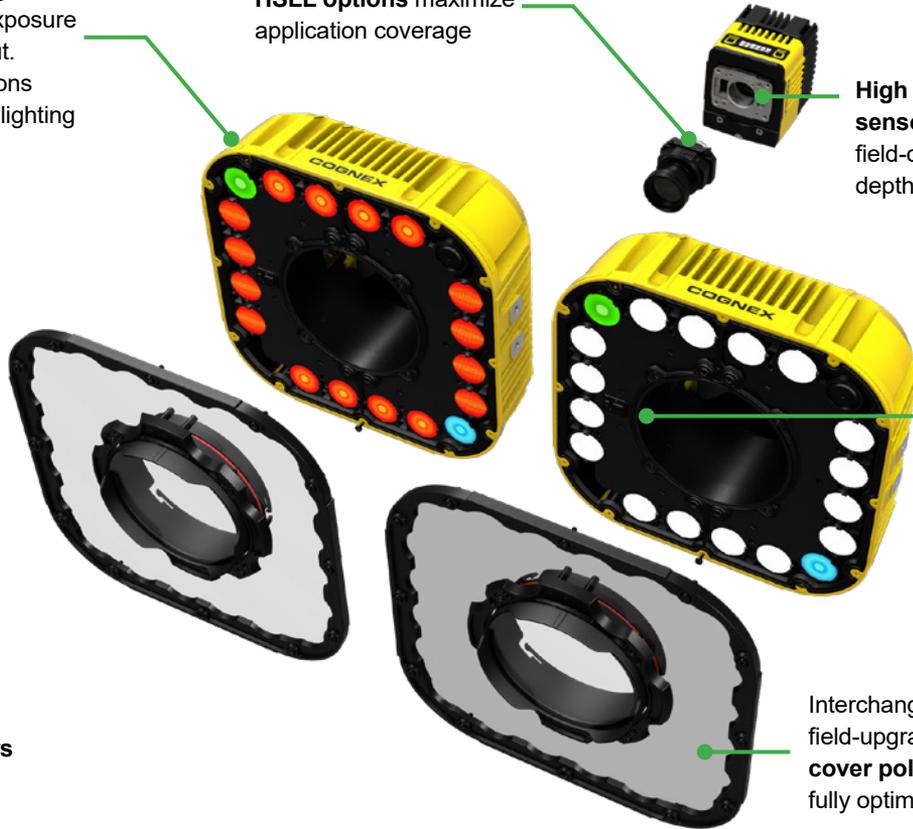
Guided laser aimer allows field-of-view to be clearly mapped to the desired target.

Distance sensor to dynamically focus the lens or trigger the reader

Multi-color LED indicators provide operator feedback

Interchangeable, field-upgradeable **front cover polarization filters** fully optimize image quality

Scalable, full-coverage reading

Synchronize multiple barcode readers to extend your field of view or simultaneously capture every side of an object for multi-side barcode reading.

Multi-reader sync (MRS) technology seamlessly increases reading coverage by enabling a primary reader to collect data from secondary readers and communicate the results to a control system.

Synchronized code reading and image offload

Improve read rates and maintain close package proximity

Cognex Modular Vision Tunnels facilitate high-throughput, no-touch barcode reading for improved traceability. These solutions leverage advanced image processing technology to read codes from extreme angles and high perspectives while maintaining high read rates.

Simplify solutions

Integrate DataMan 380 readers into your logistics tunnels to increase performance during high-speed operations. A single DataMan 380 can replace multiple devices in logistics tunnel applications thanks to the reader's large FoV and AI-accelerated decoding.

Intuitive, actionable data

Cognex Edge Intelligence Tunnel Manager provides tools to setup, monitor, and optimize Modular Vision Tunnels, including:

Tunnel Analytics

Aggregate, and analyze data from multiple devices for insights into tunnel performance, vendor compliance, and more to improve operational efficiency and revenue recovery initiatives.

Setup and Commissioning

Validate tunnel performance before deployment for repeatable, reliable installations and actionable information.

Data Forwarding

Connect data over secure MQTT to Microsoft Azure™, Amazon Web Services™, and SCADA systems such as Ignition to enhance your operation.

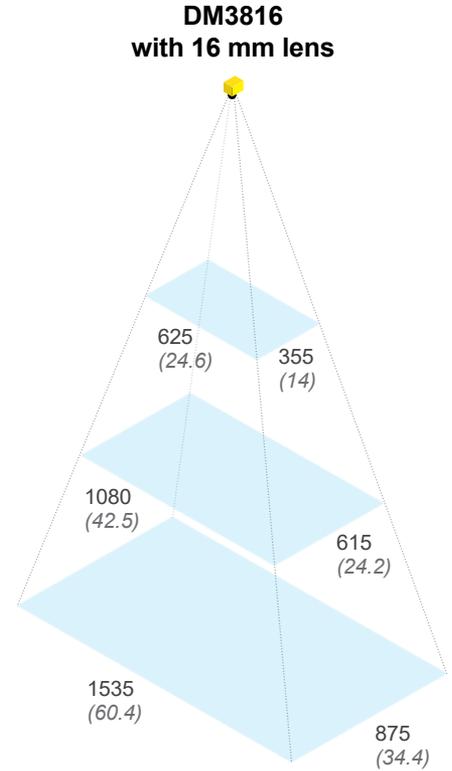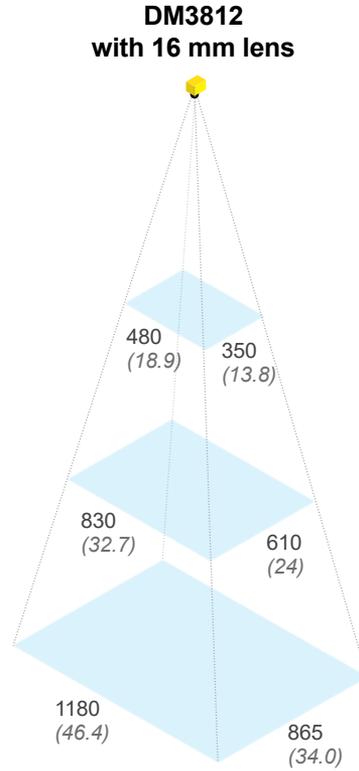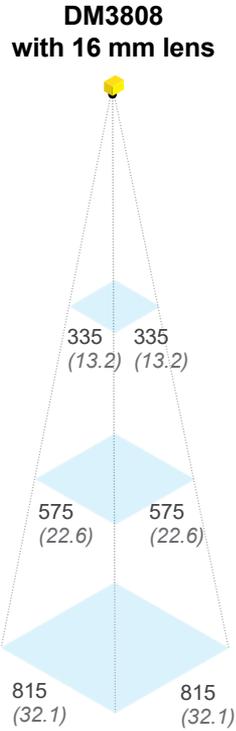## DATAMAN 380 SERIES SPECIFICATIONS

Lens Type	C-Mount, Cognex High Speed Liquid Lens Autofocus
Trigger	1 opto-isolated, acquisition trigger input.
Discrete Inputs	1 opto-isolated, acquisition trigger input. Up to 3 general-purpose inputs when connected to the Breakout cable. V_{IL}: ≤ ± 6 V V_{IH}: ≥ ± 12 V I_{TYP}: 4.2 mA @ 24 V
Discrete Outputs	Up to 4 outputs when connected to the Breakout cable. I_{MAX}: 50 mA V_{OL}: ≤ ± 3 V @ 50 mA
Status LEDs	Pass/Fail LED and Indicator Ring, Network LED, and Error LED.
Codes	1D barcodes: Codabar, Code 39, Code 128, Code 93, Code 25, Interleaved 2 of 5, UPC/EAN/JAN 2D barcodes: Data Matrix (ECC 0, 50, 80, 100, 140, and 200), QR Code, PDF 417, MaxiCode
Network Communication	2 Ethernet ports, 10/100/1000 BaseT with auto MDIX. IEEE 802.3 TCP/IP Protocol. Supports DHCP, static, and link-local IP address configuration. One port supports TSN networks. RS-232: RxD, TxD according to TIA/EIA-232-F
Power Consumption	24 V DC +/- 10% LPS or NEC class 2 Power consumption without USB device attached: Average ≤ 15 W without illumination Average ≤ 40 W with illumination Peak ≤ 2 A
Power Output	24 V DC at 1.0 A maximum to external light.
Material	Die-cast and extruded aluminum housing.
Finish	Painted.
Mounting	Four M3 threaded mounting holes. Pattern: 38.5 × 58.5 mm (1.52 × 2.60 in)
Weight	DataMan 380 with no accessories attached: 775 g (27.3 oz).
Case Temperature	0° C to 40° C (32° F to 122° F)
Storage Temperature	-20° C to 80° C (-4° F to 176° F)
Humidity	< 95% non-condensing

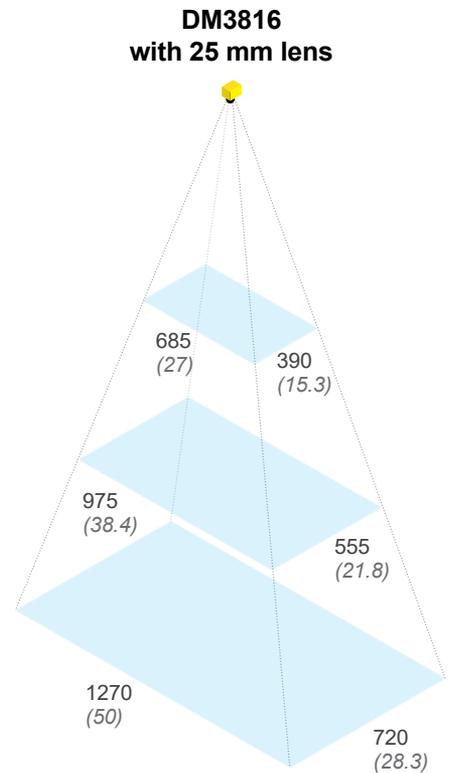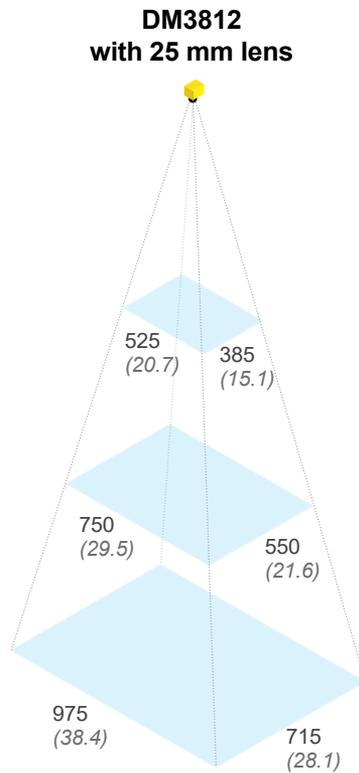## DATAMAN 380 SERIES IMAGE SENSOR SPECIFICATIONS

	DM3808	DM3812	DM3816
Sensor Type	1/1.1-inch CMOS	1/1.1-inch CMOS	1.1-inch CMOS
Image Sensor Properties	Diagonal size: 11.1 mm Pixel size: 2.74 µm (H) x 2.74 µm (V)	Diagonal size: 14 mm Pixel size: 2.74 µm (H) x 2.74 µm (V)	Diagonal size: 16.8 mm Pixel size: 2.74 µm (H) x 2.74 µm (V)
Maximum Image Resolution (pixels)	2840 × 2840 (8.06 MP)	4096 x 3000 (12.28 MP)	5320 x 3032 (16.13 MP)
Electronic Shutter Speed	Minimum exposure: 15 µs Maximum exposure: 200 ms		

Field of view diagrams

Working distances
Units: mm *(in)*
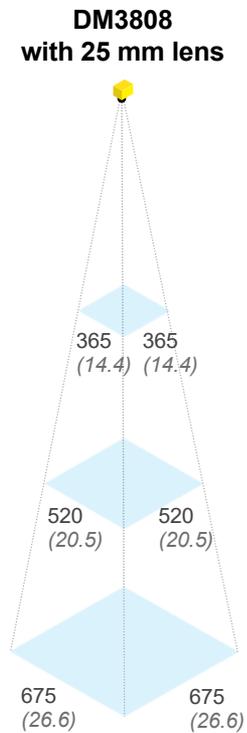
DM3808
with 16 mm lens

DM3812
with 16 mm lens

DM3816
with 16 mm lens

Minimum
700 *(27.6)*

335 *(13.2)*   335 *(13.2)*

480 *(18.9)*   350 *(13.8)*

625 *(24.6)*   355 *(14)*

Midpoint
1200 *(47.2)*

575 *(22.6)*   575 *(22.6)*

830 *(32.7)*   610 *(24)*

1080 *(42.5)*   615 *(24.2)*

Maximum
1700 *(66.9)*

815 *(32.1)*   815 *(32.1)*

1180 *(46.4)*   865 *(34.0)*

1535 *(60.4)*   875 *(34.4)*

Working distances
Units: mm *(in)*

DM3808
with 25 mm lens

DM3812
with 25 mm lens

DM3816
with 25 mm lens

Minimum
1200 *(47.2)*

365 *(14.4)*   365 *(14.4)*

525 *(20.7)*   385 *(15.1)*

685 *(27)*   390 *(15.3)*

Midpoint
1700 *(66.9)*

520 *(20.5)*   520 *(20.5)*

750 *(29.5)*   550 *(21.6)*

975 *(38.4)*   555 *(21.8)*

Maximum
2200 *(86.6)*

675 *(26.6)*   675 *(26.6)*

975 *(38.4)*   715 *(28.1)*

1270 *(50)*   720 *(28.3)*

DATAMAN 380 KITS

	Resolution	Software	Lens	Focus	Illumination
	8 MP 12 MP 16 MP	1D/2D omnidirectional code reading	16, 25, 35 mm C-mount lensing + lens cover	Custom pre-focus (optional)	Integrated or external illumination (red or white)

MOUNTING BRACKETS

	Product ID	Description
	DMBK-PIVOT-DM380	Pivot mounting bracket
	DMBK-PVT-HPIT-380	U-shaped mounting bracket for use with HPIT

LENSES

	Lens Product ID	Lens Cover Product ID	Description
	CLN-C16F06-UR	COV-380-CMNT-45	16 mm f6.5.5 C-mount lens
	CLN-C25F06-UR	COV-380-CMNT-45	25 mm f6.5.5 C-mount lens
	LEC-86571	COV-380-CMNT-60	16 mm var. aperture C-mount lens
	LEC-86572	COV-380-CMNT-60	25 mm var. aperture C-mount lens
	LEC-86573	COV-380-CMNT-75	35 mm var. aperture C-mount lens

COGNEX IO

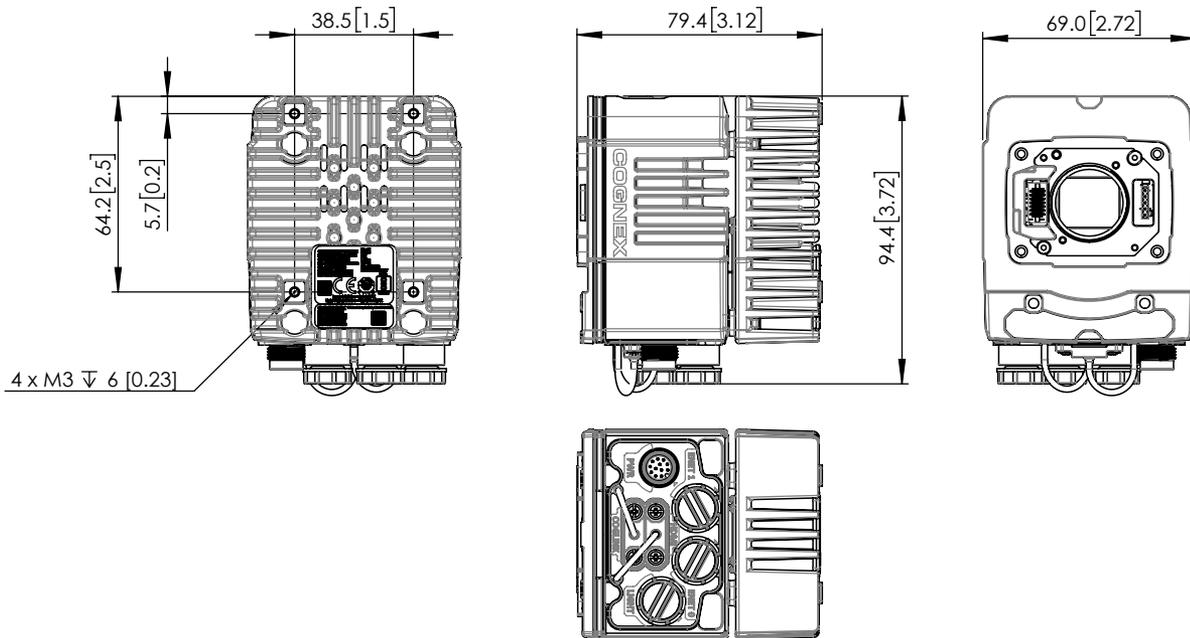|	Product ID	Description
	CPS-4A-78-L*	Emparro Power Supply 4A 7/8"- L
	CPS-8A-78-L	Emparro Power Supply 8A 7/8" - L
	CIO-MB-PNP*	Master Breakout Board (MBB)
	CIO-PD-4	Power Distribution Board (PDB)
	CIO-HS-4	Hybrid Switch (HS)
	CCB-CPS-A3N01-200/ CCB-CPS-A3E01-200*	US plug Emparro input or EU plug Emparro input (2 m)
	CCB-CIO-40021-XX	External/light cable (1–4 m)
	CCB-CPS-344557-XXX	Two channel Emparro output 7/8" to A-coded (0.5 m, 1–5 m)
	CCB-CIO-53001-200*	Primary cable 12 pin (2 m)
	CCB-CIO-P4141-XX	L-coded power chain (0.5 m, 1–5 m)
	CCB-84901-2001-XX*	X-coded Ethernet to RJ45 (2 m, 5 m, 10 m, 15 m)
	CCB-CIO-51001-XX	X-coded Ethernet chain (0.5 m, 1–5 m, 10 m, 15 m)
	CCB-CIO-40507-XX	Power cable (0.5 m, 1–5 m)
	CCB-CIO-X0116-XX	Two channel A-coded to A-coded (0.5 m, 1–5 m)
	CCB-PWRIO-XX	Power and I/O breakout cable, M12-12 to flying lead (5 m, 10 m, 15 m)

*Recommended Cognex IO components required for standalone DataMan 380 installations

Two channel Emparro output 7/8" to A-coded
CCB-CPS-344557-XXX

Primary cable
CCB-CIO-53001-200

X-coded Ethernet to RJ45
CCB-84901-2001-XX

Network

Emparro Power Supply 4A
CPS-4A-78-L

US/EU plug Emparro input cable
CCB-CPS-A3N01-200/ CCB-CPS-A3E01-200

100-240V AC/DC input

MBB
CIO-MB-PNP
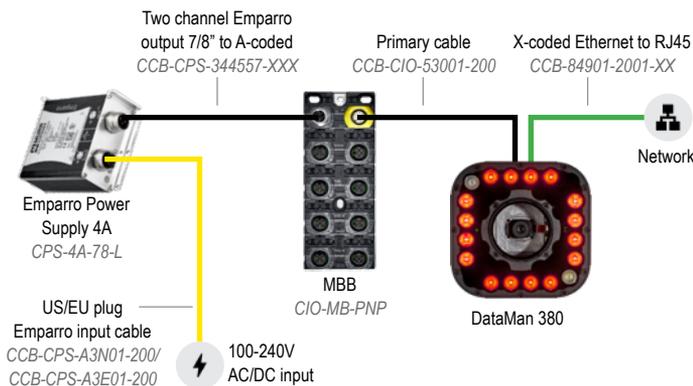
DataMan 380

Dimensions

DataMan 380 base unit

Download CAD files

38.5 [1.5]
64.2 [2.5]
5.7 [0.2]
4 x M3 ▽ 6 [0.23]
79.4 [3.12]
94.4 [3.72]
69.0 [2.72]

DataMan 380 with 45 mm lens cover

Download CAD files

38.5 [1.5]
64.2 [2.5]
5.7 [0.2]
4 x M3 ▽ 6 [0.23]
129.7 [5.11]
94.4 [3.72]
69.0 [2.72]