

COGNEX EDGE INTELLIGENCE

System performance monitoring
and device management



Machine vision tools and barcode reading systems produce insight-rich data across manufacturing and logistics facilities. At the heart of Industry 4.0 are networks of devices generating vast amounts of data, commonly referred to as the Internet of Things (IoT). The Cognex Edge Intelligence (EI) platform transforms big data into smart data to improve overall equipment effectiveness (OEE) and throughput.

EI device setup is fast and simple for both new and existing automation lines, preventing downtime and boosting productivity for your operation. The EI software allows you to configure several devices at once. It can collect and analyze performance trends, monitor configuration changes, and capture no-read and failed validation images for further analysis. With EI's powerful visualization tools you can identify issues earlier and take corrective action faster.



Configure devices and collect data in minutes

Easily connect to the EI platform through any web browser to start collecting data right away. Cognex devices on your local network are automatically discovered and users can instantly subscribe to their device data streams. Additionally, you can:

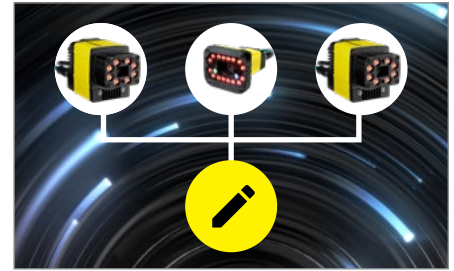
- Set user level access
- Modify IP settings
- Load firmware
- Manage configuration files
- Upload software feature keys



Connect via web browser



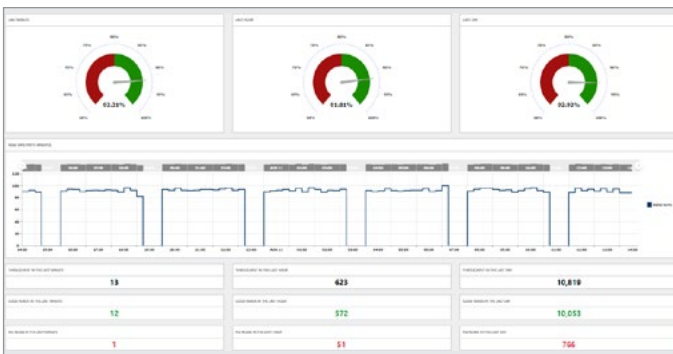
Automatically discover and subscribe to Cognex products



Configure multiple devices at once

Take swift action on performance information

The EI platform securely collects the most important device data and displays it in visual performance dashboards. Data points are plotted in a time series to help facility managers identify meaningful trends and intervene quickly when there are dips in performance.



Performance dashboards



Read rate trends

Analyze images of unread codes

EI allows you to store full resolution images for post-processing diagnosis. Analyze and categorize images of unread codes, or “no-reads,” to find the root cause of performance issues.

- Classify by similar issue
- Securely store for regulatory reasons, audits, or chargebacks



Obscured



Damaged

	8/11/20, 11:13 AM	8/11/20, 1:46 PM
configuration.communication.ethernet.address	10.12.90.53	10.12.90.51
configuration.image.display.result.size	1	0
configuration.illumination.external.precharge-time	600	20
configuration.image.focus.settle-mode	0	-
configuration.triggering.interval	100000	2000000
configuration.illumination.high-frequency-lights.enabled	false	true
configuration.illumination.high-frequency-lights.always-on	true	false
configuration.tuning.exhaustive	false	-

Monitor changes to device settings

Unexpected changes to device settings puts the entire system at risk. But with EI, all modifications to device configurations are automatically archived, including the time of day and responsible operator. If a dip in performance occurs, you can quickly revert to previous settings to get your line back to optimal performance.




- History log
- Timestamp
- Username
- Configuration comparison tool

Securely store and share data

EI allows users to securely gather results and image data from Cognex devices and store them on the EI hardware. EI can also securely forward this data to industrial control and data systems.



SPECIFICATIONS

	EI-200	EI-300	EI-700
Form Factor			
Supported Cognex Devices	DataMan 260/300/360/370/470 series		
Device Data Collection	Up to 5 readers	Up to 10 readers	Up to 20 readers
Dimensions	34 mm x 115 mm x 82 mm (1.34" x 4.53" x 3.23")	119 mm x 56 mm x 154 mm (4.69" x 2.20" x 6.06")	240 mm x 82 mm x 242 mm (9.45" x 3.23" x 9.53")
Housing	Fanless cast aluminum, steel	Fanless aluminum extrusion, steel	Fanless aluminum extrusion, steel
Power Input	12 VDC input jack	9~36 VDC 3-pin terminal block	9~48 VDC 5-pin terminal block
LAN Ports	2 GbE LAN ports	3 GbE LAN ports	3 GbE LAN ports
Digital I/O	—	8-bit Isolated Digital I/O	8-bit Isolated Digital I/O
Processing Power	Dual Core	Quad Core	Hexa Core
Image Storage	Up to 1 million images / 255 data days ¹	Up to 4 million images / 487 data days ¹	Up to 8 million images / 487 data days ¹
Accessories	Mini DisplayPort to VGA DIN Rail Mounting Kit Power Adaptor Thermal Pads	DisplayPort to VGA DIN Rail Mounting Kit Power Adaptor Wiring Terminals	DisplayPort to VGA Wall Mounting Bracket with Vibration Isolation Power Adaptor Wiring Terminals
Operating Temperature	0–40 °C (32–104 °F)	-25–70 °C (-11–158 °F)	-40–70 °C (-40–158 °F)
Storage Temperature	0–60 °C (32–140 °F)	-40–85 °C (-40–185 °F)	-40–85 °C (-40–185 °F)
Humidity	10–90%	0–90%	10–95%
Protection	IP50	IP50	IP50
Regulatory Compliance	FCC 47 CFR Part 15 CE UL Listed CB scheme WEEE Directive (2002/96/EC) RoHS 2 (2011/65/EU) RoHS 3 (2015/863/EU) EN 55024 EN 55032 EN 62368-1 IEC 62368-1	FCC 47 CFR Part 15 CE UL Listed CB scheme RoHS 2 (2011/65/EU) RoHS 3 (2015/863/EU) EN 55024 EN 55032 EN 62368-1 IEC 60068-2-27 IEC 60068-2-64	FCC 47 CFR Part 15 CE Additional Safety and EMC certifications pending WEEE Directive (2002/96/EC) ErP Directive (2009/125/EC) RoHS 2 (2011/65/EU) RoHS 3 (2015/863/EU) REACH EN 45545-2 EN 50121-3-2 EN 55032 EN 55035 EN 62368-1 IEC 60068-2-27 IEC 60068-2-64 MIL-STD-810G Test

¹ Assuming no-read images are saved as 3MP full resolution JPEGs, on a system running 24/7 with 1 trigger per second at a performance of 99% read rate.

COGNEX

Companies around the world rely on Cognex vision and barcode reading solutions to optimize quality, drive down costs and control traceability.

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