

# MATRIX 410N™



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Matrix 410N™ is an industrial 2D imager purpose-built for the most complex traceability applications in material handling and logistics, equipped with an ultra-fast image sensor that performs at 2.0 megapixels with a frame rate of 45 frames per second.

The Matrix 410N™ offers multiple communication options for increase flexibility and cost-effectiveness. The industrial imager offers Ethernet connectivity embedded, including standard communication such as TCP/IP, HTTP, FTP, as well as common industrial fieldbus communication protocols, like PROFINET IO, EtherNet/IP, Modbus TCP/IP.

In addition to flexibility, Matrix 410N™ is equipped with features for increased ease of use and configurability, with the option for a single or multi-device layout for scanning over large areas or multiple signs.

Powered by DL.CODE, Matrix 410N™ software offers an easy-to-use graphical user interface, while supporting in-line monitoring functionality, including live image display, reading statistics and diagnostics. The Matrix 410N™ also has image saving capability for reading case review, such as no reads, storing up to 3,000 images either onboard or at an external FTP client.

The embedded laser aimer and the patented Green Spot - projected onto the scanning area - offers the user a quick scanning area determination and to easily acknowledge a reading without any external accessory or software.

## HIGHLIGHTS

- Patented ultra-fast strobed lighting with stable effect for operator
- Patent Pending Packtrack 2D for short object gapping in sortation applications
- Embedded Ethernet connectivity, with common protocol support: PROFINET IO, ETHERNET/IP, TCP/IP, FTP, HTTP
- On board image storage saving up to 3,000 image (scaled)
- External connection box with parameter back up memory and display
- Increased flexibility with single reading point or multiple device cluster with easy configuration
- Laser pointing system, good read Green Spot, focusing aiming system
- Remote, web-based WebSentinel software with image archiving database

## APPLICATION

### Distribution & Retail

- Manual Presentation
- Small Objects Sorting
- Totes content scanning

### Warehouse

- End of line, Carton/objects, single or multi-side scanning

### Automotive

- Part traceability in assembly

### Medical & Pharmaceutical

- Automated storage/retrieval
- Automated Order fulfilment/validation

# TECHNICAL DATA

PHYSICAL CHARACTERISTICS	
<b>Dimensions</b>	123 x 60,5 x 87 mm (4.84 x 2.38 x 3.42 in) with protective lens cover
<b>Weight</b>	482 g (17 oz.) with lens and internal illuminator
<b>Case material</b>	Aluminum
<b>Operating temperature</b>	0° to + 50 °C (32 to 122°F)
<b>Storage temperature</b>	-20 to 70 °C (-4 to 158 °F)
<b>Humidity</b>	90% non condensing
<b>Protection class</b>	IP67
PERFORMANCE	
<b>Optical features</b>	MATRIX 410N -5xx-xxx
	SXGA (1280 x 1024)
<b>Frame rate</b>	60 frames/s
<b>Reading angles</b>	Max. Pitch: ± 35°; Tilt: 0-360°
<b>Readable symbologies</b>	1D and Stacked: IL 2/5, Code 128, Code 39, EAN/UPC, PDF417, Micro PDF417, Pharmacode, GS1 DataBar (RSS) family, and many more
	2D: Data Matrix, QR Code, Micro QR, Maxicode, Aztec
<b>Communication interface</b>	Postal: Royal Mail, Japan Post, Planet, Postnet and many more
	RS232 + RS232C/RS422/RS485 up to 115.2 Kbit/s
<b>Connectivity modes</b>	Ethernet IEEE 802.3 10 Base T and IEEE 802.3U 100 BaseTX compliant
<b>Digital inputs</b>	ID-NET™ port up to 1 Mbps
<b>Digital outputs</b>	Pass Through, Master/Slave, Ethernet point to point
<b>Programming method</b>	2 opto-isolated. Polarity insensitive and SW Programmable.
<b>User interface</b>	3 SW programmable PNP/NPN ( short circuit protection ). OUT3 programmable as input
<b>Code quality verification</b>	Output current 100 mA max, Saturation voltage < 3 V @ 100 mA
	X-PRESS™ Human Machine Interface
	Windows™ based SW (DL.CODE™) Ethernet link
	X-PRESS™ Human Machine Interface
	Beeper, Programmable Push Button, LEDs (Status, Com, Trigger, Good, Ready, Power on, Network presence, Good read Spot)
	AIM DPM, ISO/IEC 15415, ISO/IEC 15416, ISO/IEC 16022, ISO/IEC 18004, AS9132A
ELECTRICAL CHARACTERISTICS	
<b>Power supply</b>	10 to 30 VDC
<b>Power consumption</b>	8 W max; 5W typical
WARRANTY	
<b>Warranty</b>	2-Year Factory Warranty

## MODELS AND ACCESSORIES

	P/N	DESCRIPTION
<b>Matrix 410N Reader Body</b>	937401082	MATRIX 410N 500-010 1.3MP-60FPS-ETH
	937401083	MATRIX 410N 700-010 2.0MP-45FPS-ETH
<b>Focusing Lenses</b>	93ACC1793	LNS-1006 6MM C-MOUNT LENS
	93ACC1794	LNS-1109 9MM C-MOUNT LENS
	93ACC1795	LNS-1112 12,5MM C-MOUNT LENS
	93ACC1796	LNS-1116 16MM C-MOUNT LENS
	93ACC1797	LNS-1125 25MM C-MOUNT LENS
	93ACC1798	LNS-1135 35MM C-MOUNT LENS
	93ACC1799	LNS-1150 50MM C-MOUNT LENS
	<b>Internal Lighting modules</b>	93A401019
93A401020		LT-002 INTERNAL LT RED WIDE ANGLE
93A401021		LT-003 INTERNAL LT WHITE NARROW ANGLE
93A401023		LT-005 INTERNAL LT BLUE FOR DPM
93A401022		LT-004 INTERNAL LT WHITE WIDE ANGLE
93A401024		LT-006 INTERNAL LT RED SUPERNARROW ANGLE
93A401030		LT-007 INTERNAL LT RED SUPERNAR+LASER P
93A401026		LT-010 HI POWER LT BLUE SUPERNARROW
93A400031		LT-011 HI POWER LT RED SUPERNARROW

## DATALOGIC PRODUCT OFFERING



Sensors



Hand Held scanners



Mobile Computers



Laser Marking Systems



Safety Laser Scanner



Vision Systems



Stationary Industrial Scanners



Safety Light Curtains

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