

Product Announcement



Ready. Set. Read.



Datalogic Industrial Automation is pleased to announce 3 new product lines:

MATRIX 300N

MATRIX 410N

XRF410N



These 3 product lines belong to the new Matrix N™

MATRIX N line



DL.CODE software introduces crucial advantages in the MATRIX product offering:

1. Superior product usability. DL.CODE is designed to deliver **TOP EASE OF USE** in **setup and monitoring**
2. Superior reading performance: there is a **NEW STRONG DECODING ENGINE EMBEDDED** and **FASTER IMAGE SENSORS** in the portfolio!
3. **SUPERIOR SETUP FLEXIBILITY**, making product fitting a large variety of application demands with easy
4. **NEW FUNCTIONAL FEATURES**, as the 2D PackTrack
5. New solutions, ready out-of-the-box: it is the XRF410N™.

Thanks to the DL.CODE software, the Matrix N line will quickly gain a leading positioning in the market merging Datalogic’s superior hardware platforms with customer ease-of-use.

Matrix N Line will initially include the following products:

	Planned Market Release
Matrix 300N™	Q1 2015
Matrix 410N™	
XRF410N™	
Matrix 210N™	Q2 and Q3 2015
Matrix 450N™	Q3 2015

MATRIX PORTFOLIO UPGRADES:

The DL.CODE software is only part of the value introduced with the Matrix N line.

The Matrix N Line incorporates important product hardware upgrades:

1. **Matrix 410N** → New high speed sensors, at 45 fps and 60 fps
2. **Matrix 300N** → New optical models with additional new lenses for mid-range reading
3. **XRF410N** → A cost-effective Matri410N solution for logistics applications



Matrix N Line: TOP 5 FEATURES

#1

EASE OF PRODUCT CONFIGURATION

The Matrix N makes all operational steps EASY, from the early evaluation of an application through the final commissioning.

The new configuration software - DL.CODE - makes any interaction with the MATRIX N extremely

1. USER-FRIENDLY
2. INTUITIVE
3. FAST
4. RELIABLE

This is accomplished by eliminating need for any specialized technical skills or understanding of the reading technology.

Ease of use is a crucial argument in winning additional business. In fact, ease of use is considered, more and more, a Key Buying Criteria for customers.

EASE OF USE means reducing costs and increase productivity:

1. Saves time in installation phase
2. Guarantee of optimal product setup and maximization of the product reading capability
3. No need for intensive technical trainings for product setup
4. Product validation during installation and regular maintenance requires very minimal skills and is extremely fast



DL.CODE's Ease Of Use

SMART PARAMETER DISPLAY



Only the relevant parameters for the active configuration step are displayed.

Configuration is organized in logical steps in order to help the user with the optimal, quicker setup.

No competitor offers dynamic parameters visualization.

DECODING AUTOLEARN

Automatically determine the code in the reading area or region of interest and optimize the decoding setup to maximize reading speed and performance.

Focal point determination and photometric setup is automated.

Unlike the competition, DL.CODE is capable to automatically determine different code typologies in a single picture



LANGUAGE CONFIGURATION FOR ANY USER



Software release 1.0 (2015 JAN) includes:
English, Italian, German, Chinese

Software release 1.1 (2015 Q2) extends to:
Japanese, French, Spanish.

FAST AND RELIABLE VERIFICATION OF PARAMETER CHANGES



Parameter changes are instantly verified through the reader output on the console panel. A fast, easy, and reliable way to validate the setup.

No competitor has a real-time, embedded feedback on the configuration, with image, textual terminal and decoding

EASILY ACCESSIBLE HELP INFORMATION

Every parameter is linked with the online help session.
Help information can be directly accessed by clicking on the parameter name in configuration view.
No searching required.





GRAPHICAL SETUP DISPLAY

Graphical configuration feedback improves the speed and ease of use for setups. Users no longer need to inspect every parameter value.

No competitor offers the same level of automated configuration representation.

#2

PRODUCT CONFIGURABILITY

DL.CODE merges together ease of use and flexibility:

MULTIPLE IMAGE SETUP



Different image acquisition settings improve reading performance and accommodate multiple code types.

Up to 10 independent image setups.

Moreover, multiple decoding regions can be defined with the goal to improve reading speed with multiple code applications or codes with different features.

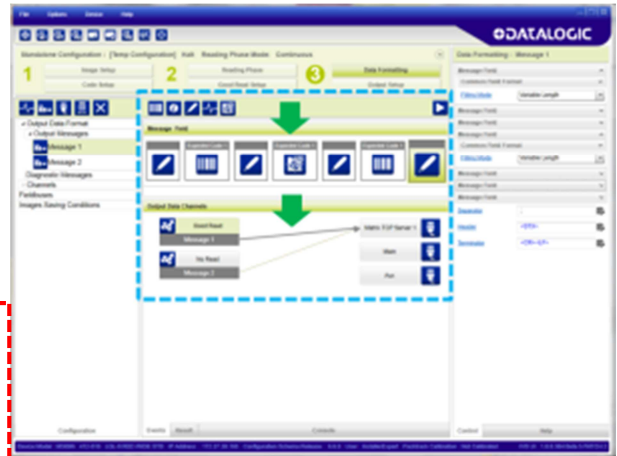
No competitor offers multi-image visualization for easy comparison



MESSAGE FORMAT CUSTOMIZATION

The read result message can be customized and formatted, as well as additional information, and the code data can be included, with a drag and drop functionality.

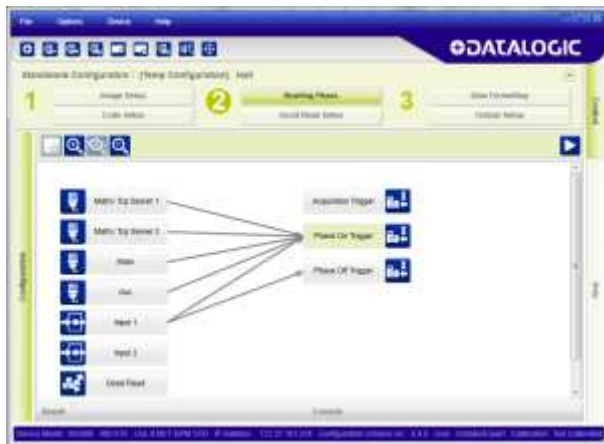
No competitor offers an effective format message definition along with ease of use.

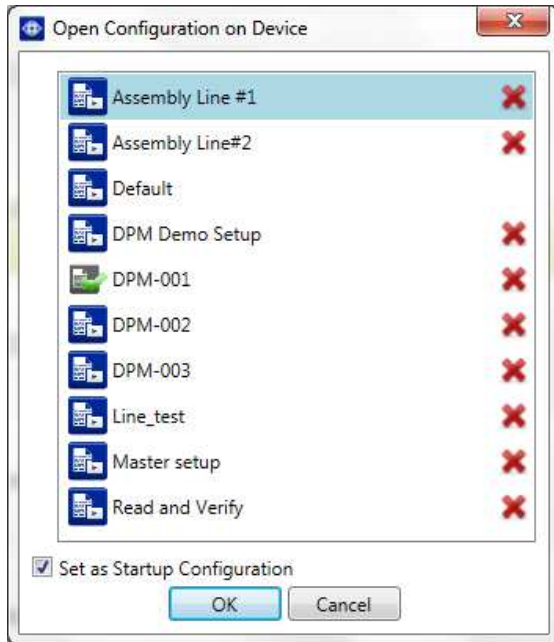


SCANNING TRIGGERS

Scanning triggers can be defined in a flexible way, over many different sources.

No competitor offers effective scan trigger flexibility with equivalent ease of use and smart graphical representation.





A SINGLE DEVICE CAN STORE MANY SETUPS ON BOARD

No competitor offers this feature!

AUTOMATIC CLUSTER CREATION

Multiple readers can be networked / clustered to extend the reading area. Cluster setups are automated; creating a multi-device array is a quick operation.

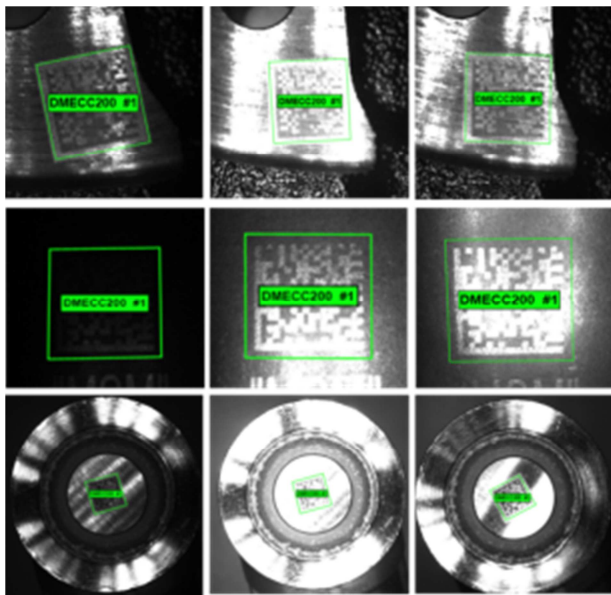
No competitor offers this feature!



#3

MATRIX N™ LINE BOOSTS READING PERFORMANCE

A powerful new decoding engine is built into the Matrix N™ product line.



DPM READING CASES ARE QUICKLY RESOLVED

The new decoding engine solves the most demanding DPM applications, overcoming typical lighting issues.

Perfect read rate is guaranteed, even in applications with environmental variability or noisy backgrounds.

CODE AUTOLEARN MAXIMIZES PERFORMANCE

The autolearn algorithm determines the optimal decoding setup using multiple images representing the application variability such as code quality or different parts.

No competitor offers this feature!



DECODING IMPOSSIBLE TO READ CODES

Interrupted linear codes, folded codes, or codes with light reflections are successfully read.



2D PACKTRACK CAPABILITY

2D PackTrack is Matrix software algorithms that solve sorting applications over conveyors where carton, parcels, or packages are close to one another, i.e the gap between cartons is small and the code position is random throughout the scanning area.



2D PackTrack is a patent pending feature. No competitor offers this feature!



#4

EASE OF MAINTENANCE



LIVE IMAGE ON A WEB PAGE

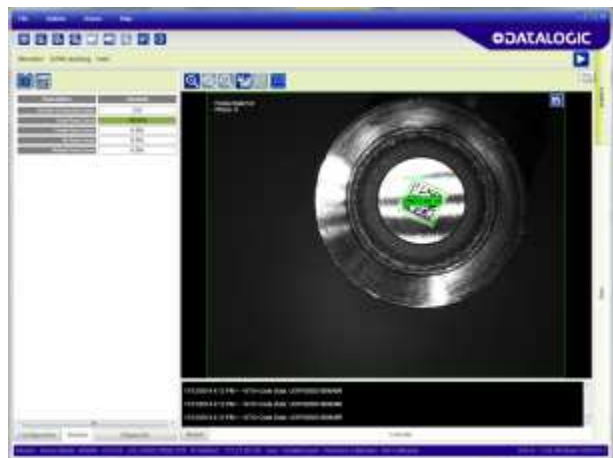
Independently by the specific reader configuration or operating mode, you can open a web page to monitor the live image from the reader.

No competitor offers this feature!

INCREASE UPTIME

With the reader monitoring tool, devices can be monitored during production line operation, without disconnecting the reader from the line controller.

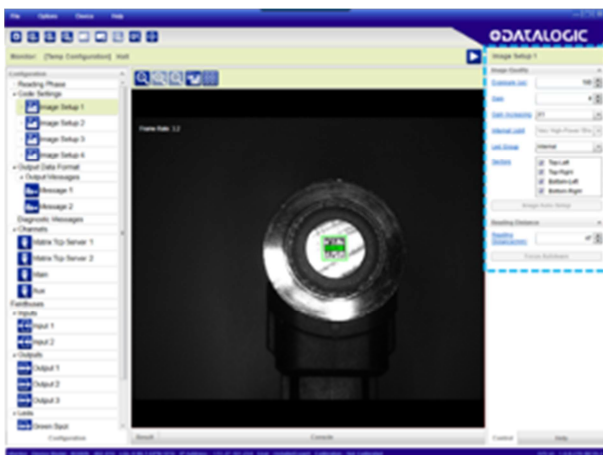
The monitoring feature offers a perfect diagnostic tool for line operators.



OPTIMIZE THE SETUP DIRECTLY IN LINE

The monitor tool allows for immediate fine tuning of the reader, without stopping production to access the main configuration.

No competitor offers this feature!



VALIDATE PERFORMANCE & ENSURE
RELIABILITY

The CBX500 with embedded display provides a human readable display at the point of service. Uptime and reliable replacement is guaranteed with the embedded parameter back up module.

Most of the competition cannot offer an industrial, complete and modular solution like this one!



#5

NEW MATRIX OPTIONS IN THE PRODUCT PORTFOLIO

THE NEW MATRIX 410N

Beyond the new DL.CODE software interface, the Matrix410N gets a new level of scanning performance thanks to the faster image sensors.



NEW MATRIX 410N MODEL	New Image sensor frame rate	Frame rate % increase vs existing models
Matrix 410N 500 010	60 fps	+120 %
Matrix 410N 700 010	45 fps	+200 %

Matrix 410N offers an additional boost in reading performance by combining:

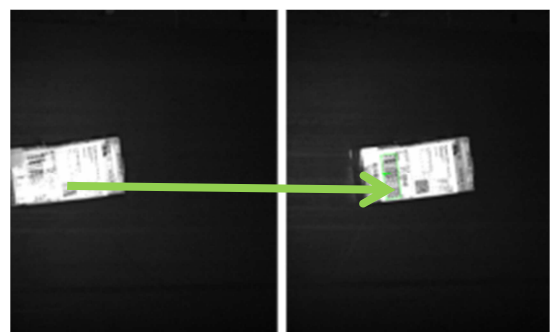
Faster image sensors, acquiring a higher number of pictures during the scanning phase, with the advantage to increase the reading performance and robustness in the reading.

WITH

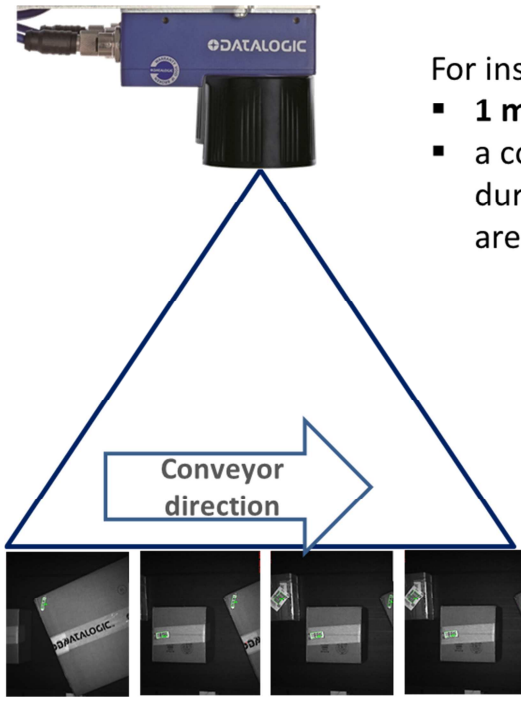
Faster decoding process, thanks to a smart code detector that quickly select the right part of an image with a code.

The advantages of the Matrix 410N:

1. Higher reading redundancy, resistance to damaged codes or light reflections
2. Higher speed tolerance in logistics applications



Triple Reading Redundancy with the Matrix 410N!



For instance

- **1 m/s** conveyor speed
- a code is captured 6+ times during its transit in the scanning area

PHYSICAL PRODUCT CONNECTOR UPGRADE

The Matrix 410N embeds a new connector 17 pin, M12. This connector is the same as the Matrix 300N.



Matrix 410N connects to the CBX100/500 or to the QL/QLM with the following cables:

93A050058	CAB-DS01-S M12-IP67 TO CBX 1M
93A050059	CAB-DS03-S M12-IP67 TO CBX 3M
93A050060	CAB-DS05-S M12-IP67 TO CBX 5M

Matrix 410 (VISISET models) lifecycle:

1. Matrix 410 400 0x0 is discontinued. This product version will normally be orderable up to March 2015. Official obsolescence note will be released. Obsoleted models will be fully replaced by the Matrix 410N 500 010 (PN 937401082), equipped with a 1.3 MPixel sensor, 60 fps.

Matrix 410N 500 010 ↔ Matrix 410 400 0x0:

1. The new Matrix 410N 500 010 (PN 937401082) model has Ethernet connectivity by default (not an option).
2. The new Matrix 410N 500 010 model has a new embedded connector 17p – M12.
3. The same C-MOUNT lens has slightly different optical angles on the two devices in question. Please refer to the user manual of the Matrix 410 500 010 for details.



MATRIX 410N – DISTINCTIVE FEATURES

The only reader in the market with PackTrack capabilities.
Ability to manage multiple objects inside the reading area.

PACKTRACK CAPABILITIES



READING PERFORMANCE

Reads “impossible to read” codes.

Offering intrinsic scanning DOF, unlike any other



UNMATCHED MODULARITY

Industrial ID-NET + Cluster configuration + QL accessories



THE ONLY DEVICE BUSINESS-SOLUTION ORIENTED

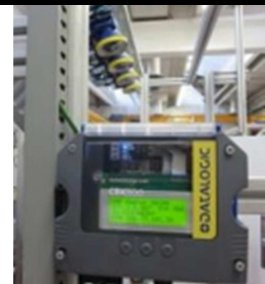
Ready out-of-the-box, with fully functional factory assembly.

Reading diagrams and reading performance documented.



**THE EASIEST
PRODUCT TO
INSTALL, MONITOR &
SERVICE**

Backup and restore (CBX + display) with large on-board memory storage for no read image saving and http live images.



**EXTRA LARGE ON
BOARD MEMORY**

Up to 32 images (full frame 2 MPIX) storage capacity on board.

Order Number	MATRIX 410N™ - DL.CODE	Available on
937401082	MATRIX 410N 500-010 1.3MP-60FPS-ETH	January 2015
937401083	MATRIX 410N 700-010 2.0MP-45FPS-ETH	January 2015
Accessories		
Lenses for Matrix 410N™		
93ACC1793	LNS-1006 6MM C-MOUNT LENS	Available
93ACC1794	LNS-1109 9MM C-MOUNT LENS	Available
93ACC1795	LNS-1112 12,5MM C-MOUNT LENS	Available
93ACC1796	LNS-1116 16MM C-MOUNT LENS	Available
93ACC1797	LNS-1125 25MM C-MOUNT LENS	Available
93ACC1798	LNS-1135 35MM C-MOUNT LENS	Available
93ACC1799	LNS-1150 50MM C-MOUNT LENS	Available
Internal Lighting for Matrix 410N™		
93A401019	LT-001 INTERNAL LT RED NARROW ANGLE	Available
93A401020	LT-002 INTERNAL LT RED WIDE ANGLE	Available
93A401021	LT-003 INTERNAL LT WHITE NARROW ANGLE	Available
93A401023	LT-005 INTERNAL LT BLUE FOR DPM	Available
93A401022	LT-004 INTERNAL LT WHITE WIDE ANGLE	Available
93A401024	LT-006 INTERNAL LT RED SUPERNARROW ANGLE	Available
93A401030	LT-007 INTERNL LT RED SUPERNAR+LASER P	January 2015
93A401026	LT-010 HI POWER LT BLUE SUPERNARROW	Available
93A400031	LT-011 HI POWER LT RED SUPERNARROW	Available
Cables for Matrix 300N and Matrix 410N		
93A051346	CAB-ETH-M01 M12-IP67 ETHERNET CABLE (1M)	Available
93A051347	CAB-ETH-M03 M12-IP67 ETHERNET CABLE (3M)	Available
93A051348	CAB-ETH-M05 M12-IP67 ETHERNET CABLE (5M)	Available
93A050058	CAB-DS01-S M12-IP67 TO CBX 1M	Available
93A050059	CAB-DS03-S M12-IP67 TO CBX 3M	Available
93A050060	CAB-DS05-S M12-IP67 TO CBX 5M	Available

XRF410N products are described in a separate launch documentation.

NEW MATRIX 300N



The MATRIX 300N includes many new models for never before covered applications.

In addition to the existing optical model – liquid lens 9 mm focal length – a large variety of manual setup optics are introduced.

With its unrivalled performance and pricing, the new MATRIX 300N models will quickly lead the market for products of its class – with sales to both new and existing customers.



Matrix 300N with manual focus control offers the following advantages:

1. Adjustable focus, very high precision user control
2. Top image quality, supported by premium class focal lenses
3. Superior reading performance, in FOV, DOF and motion speed
4. Large variety of optical versions to match specific reading demands
5. Very simple focus setup.
6. Focus tuning without stopping the line: live image is on a web page, focus control is available externally to the reader.

	FOCUS CONTROL	OPTICAL MODEL	COMPETITIVE POSITIONING
MATRIX300N	ELECTRONIC, Liquid Lens	LQL 9 MM	Premium Ease of use
MATRIX300N	MANUAL, External	LNS 6 MM	Superior reading performance, FOV and DOF.
MATRIX300N	MANUAL, External	LNS 9 MM	Large optical models variety, satisfying any requirement.
MATRIX300N	MANUAL, External	LNS 12.5 MM	Superior optical setup vs any equivalent competitor products.
MATRIX300N	MANUAL, External	LNS 16 MM	Superior optical design and external control of focal position.

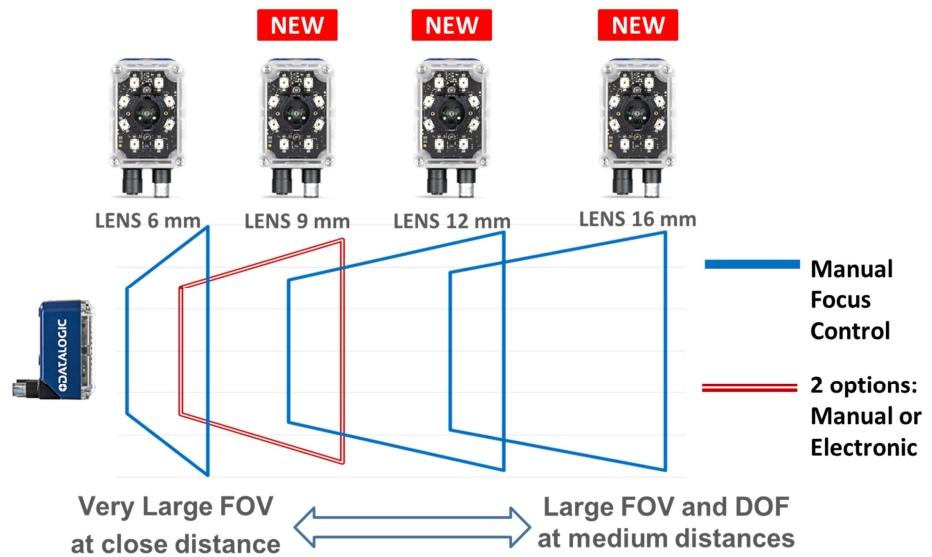


MATRIX 300N – DISTINCTIVE FEATURES

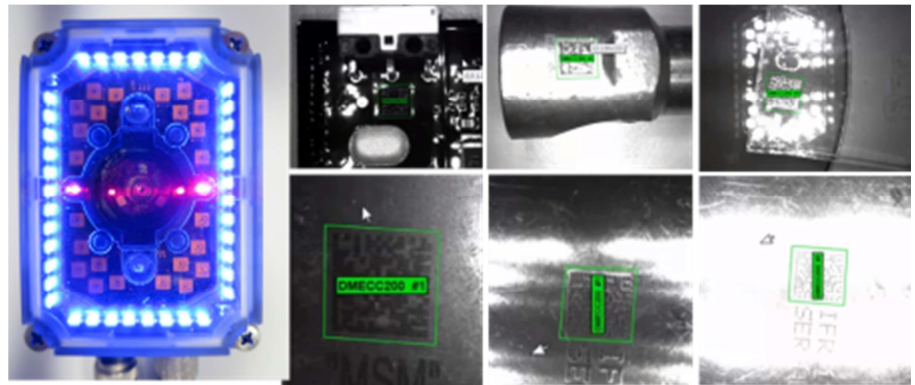
Different focal lenses and variable focus options, manual or electronic controlled.

The external manual focus control is a unique feature, merging unmatched ease of setup and an unbeatable price.

THE LARGEST
OPTICAL
OFFERING
IN ITS CLASS

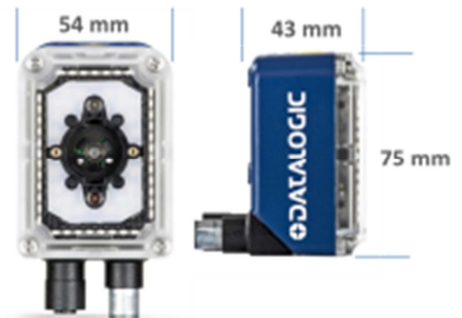


SUPERIOR
PERFORMANCE ON
DIRECT PART
MARKING



SUPERIOR INDUSTRIAL FEATURES.

- Ultra-compact in the scanning axis direction
- Rotating connector to fit into any tight installation space
- IP67 enclosure rate
- 0–50°C Operating temperature



The new DL.CODE software makes the use of a Matrix 300N better than any other product available in the market.

EASIEST PRODUCT TO INSTALL / MONITOR / MAINTAIN.



Installation is extremely easy and fast. Device monitoring can occur without disconnecting it from the controls or stopping production.

GREATEST OFFERING OF EMBEDDED CONNECTIVITY

Greatest variety of embedded connectivity options:

1. PoE: Power Over Ethernet Model
2. PROFINET IO embedded
3. EtherNet/IP embedded



Order Number	MATRIX 300N™ – DL.CODE	Availability
937600084	MATRIX 300N 423-010 LNS-9 RED MED STD	January 2015
937600085	MATRIX 300N 453-010 LNS-9 WHT WIDE STD	January 2015
937600092	MATRIX 300N 473-010 LNS-9 LT-DPM STD	January 2015
937600093	MATRIX 300N 483-010 LNS-9 MLT-DPM STD	January 2015
937600094	MATRIX 300N 473-011 LNS-9 LT-DPM ESD	January 2015
937600095	MATRIX 300N 483-011 LNS-9 MLT-DPM ESD	January 2015
937600096	MATRIX 300N 473-012 LNS-9 LT-DPM ESYF	January 2015
937600088	MATRIX 300N 434-010 LNS-12 RED NARR STD	January 2015
937600089	MATRIX 300N 464-010 LNS-12 WHT NARR STD	January 2015
937600080	MATRIX 300N 435-010 LNS-16 RED NARR STD	January 2015
937600081	MATRIX 300N 465-010 LNS-16 WHT NARR STD	January 2015
937600070	MATRIX 300N 411-010 LNS-6 RED WIDE STD	January 2015
937600071	MATRIX 300N 481-010 LNS-6 MLT-DPM STD	January 2015
937600072	MATRIX 300N 411-011 LNS-6 RED WIDE ESD	January 2015
937600073	MATRIX 300N 481-011 LNS-6 MLT-DPM ESD	January 2015
937600074	MATRIX 300N 411-012 LNS-6 RED WIDE ESYF	January 2015
937600075	MATRIX 300N 481-012 LNS-6 MLT-DPM ESYF	January 2015
937600086	MATRIX 300N 423-040 LNS-9 RED MED POE	January 2015
937600090	MATRIX 300N 434-040 LNS-12 RED NARR POE	January 2015
937600082	MATRIX 300N 435-040 LNS-16 RED NARR POE	January 2015
937600050	MATRIX 300N 412-010 LQL-9 RED WIDE STD	January 2015
937600051	MATRIX 300N 452-010 LQL-9 WHT WIDE STD	January 2015
937600052	MATRIX 300N 472-010 LQL-9 LT-DPM STD	January 2015
937600053	MATRIX 300N 482-010 LQL-9 MLT-DPM STD	January 2015
937600054	MATRIX 300N 412-011 LQL-9 RED WIDE ESD	January 2015
937600055	MATRIX 300N 452-011 LQL-9 WHT WIDE ESD	January 2015
937600056	MATRIX 300N 472-011 LQL-9 LT-DPM ESD	January 2015
937600057	MATRIX 300N 482-011 LQL-9 MLT-DPM ESD	January 2015
937600058	MATRIX 300N 412-012 LQL-9 RED WIDE ESYF	January 2015
937600059	MATRIX 300N 452-012 LQL-9 WHT WIDE ESYF	January 2015
937600060	MATRIX 300N 472-012 LQL-9 LT-DPM ESYF	January 2015
937600061	MATRIX 300N 482-012 LQL-9 MLT-DPM ESYF	January 2015
937600062	MATRIX 300N 412-040 LQL-9 RED WIDE POE	January 2015
937600063	MATRIX 300N 452-040 LQL-9 WHT WIDE POE	January 2015
937600066	MATRIX 300N 472-041 LQL-9 LT-DPM POE ESD	January 2015
937600067	MATRIX 300N 482-041 LQL-9 MLT-DPM POE ES	January 2015



COMPELLING VALUE FOR QUALITY PARTNERS

The Matrix N makes it “Easy to do business”

1. **EASE OF USE** means eliminating the need of technical trainings, reduced personnel costs, increasing profit margins
2. **QP has the opportunity to offer effective product support, remotely.**
3. **Product demonstration is easy and effective.**

SELLING TO END CUSTOMERS

The Matrix N reduces the **TOTAL COST OF OWNERSHIP** of a reading solution:

1. The new software can be used by any operator, without any special technical skills and without the need of trainings
2. The operator can go **from the shipping box to a working installation in a few minutes**
3. The operator can validate the product setup during the configuration process, before going live into the operation line. No technical risks, no unexpected device behavior discovered in-line.
4. The operator can easily monitor the reading performance, image quality, and diagnostic information from the configuration interface, while the reader is operational.



5. The operator can completely emulate the application off-line, with an unbeatable level of interactivity and no need for a physical device.
6. The device supports multiple configurations on-board: one global configuration can be used to standardize readers at a customer, unify spare parts since the same reader maintains multiple configurations on-board.

SELLING TO MACHINE BUILDERS OR SOLUTION PROVIDERS.

The Matrix N **reduces solution deployment costs:**

1. Installation of products into machines or systems is fast.
2. No specialized technical skills are required to install a reader in a machine.
Configuration is automated and optimal reading performance is quickly achieved.
Time saving is efficiency.
3. Functional integration of a Matrix N is efficient: software flexibility means many applications can be solved with standard product software
4. Multiple reader configurations on-board means the possibility to switch from different production lines with ease, or switch from different product configurations across different machines.
5. Machine Builders and Solution Providers can offer additional value added features to their customers with image saving or live image monitoring



MATRIX N LINE – PRICING POSITIOINING

With the goal in **doubling** the customer interest to quickly adopt the Matrix N line and to generate new relevant business opportunities, the Matrix N line is launched with an aggressive price point.

The MATRIX N Line is superior for several distinctive and unique aspects with respect to the current competitor offering. The Matrix N Line is expected to contribute towards increasing Datalogic's market share both in the factory automation and logistics markets, thanks to an effective position against the competition.

Superior product features in combination with a better list price represent a very strong weapon against the competition, making Datalogic a leader in the market.

List price is enclosed.



CROSSOVER POLICY

Datalogic’s priority is the continuation of the existing business and protection of our current customer’s investments. For this reason, a long cross-over period with the existing VISISET products will be made available.

It is important to remark that any of the Matrix 410 and Matrix 300 VISISET are fully replaceable by the new equivalent models included in the Matrix N line (with DL.CODE).

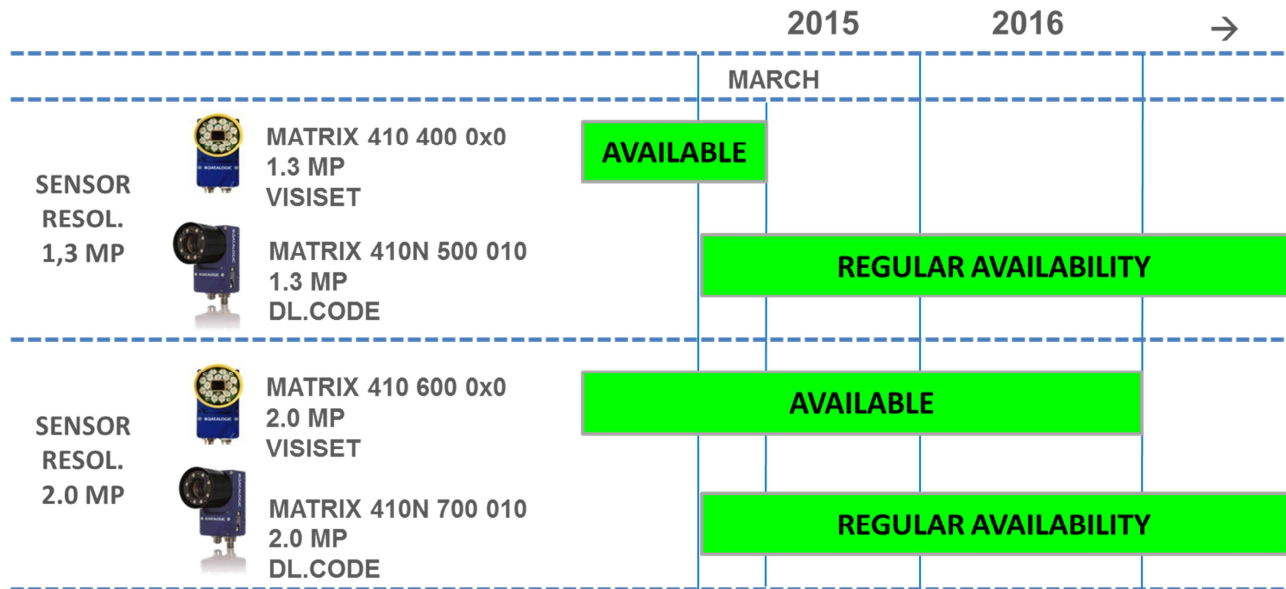
The long cross-over period is to guarantee an easy install base maintenance, especially where software customizations exists.

The following transition policy will be applied to **Matrix 410 VISISET models**:

VISISET MODEL	PART NO.	CUSTOMER ORDERS ACCEPTED UP TO	NOTES ON MODEL	NEW EQUIVALENT DL.CODE MODEL
Matrix 410 400 0x0 (1.3 MPix versions)	937401031 937401032	March 2015	The discontinued VISISET models are fully replaced by the new Matrix 410N. The new version is SER+ETH and it features a much higher acquisition frame rate.	Matrix 410N 500 010 (PN 937401082). 1.3MP-60FPS-ETH
MATRIX 410 600-0x0 (2.0 MPix, ETH + SER)	937401033 937401034	December 2016		MATRIX 410N 700-010 (PN 937401083) 2.0MP-45FPS-ETH



The transition policy for Matrix 410 is also represented hereafter:



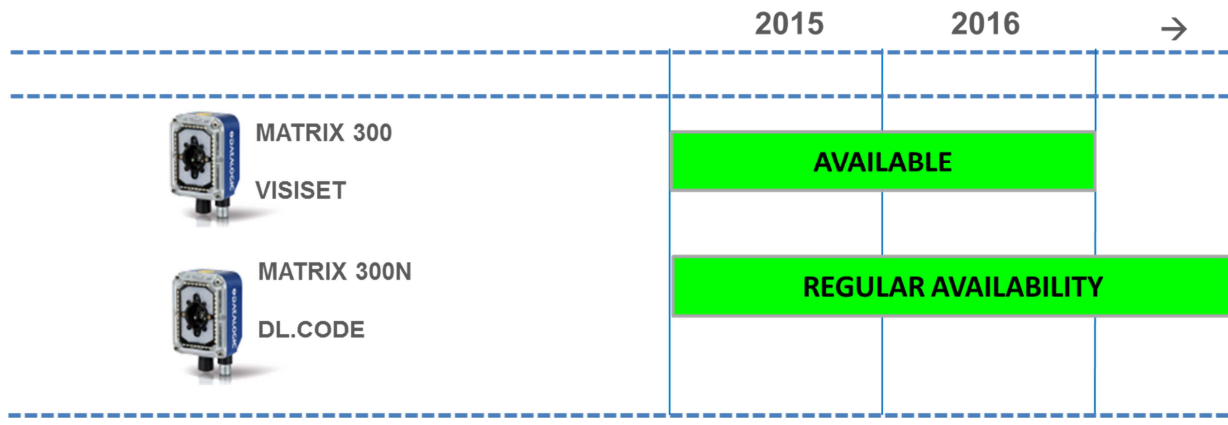
The Matrix 410N 500 010 and Matrix 410N 700 010 incorporate a new signal connector 17p – M12.

The following transition policy will be applied to Matrix 300 VISISET models:

VISISET MODEL	PART NO.	CUSTOMER ORDERS ACCEPTED UP TO	GUIDELINES	NEW EQUIVALENT DL.CODE MODEL
Matrix 300	Any available model with the VISISET software	December 2016	Matrix 300N model range fully replace and exceed the variety of the VISISET models.	Any available Matrix 300N model with the DL.CODE software



The transition policy for Matrix 300 is also represented hereafter:



STS400. SOLUTION FOR TIRES – GUIDELINES.

At this time, products and solutions for the tires industry will not be affected by any changes.

The existing STS400 tires solutions are totally preconfigured and calibrated from the factory. Tires customer already benefit for the ready-to-use approach and optimized performance.

Through the regular availability of the STS400 and its parts, we guarantee the maximum business continuation, without any change for tire customers.

Product	Short Description	Model type	Availability
Matrix 410 ATS-xxx	Matrix 410 assemblies for tires applications	Any model	REGULAR AVAILABILITY
STS400	STS400 array solution for tire sorting	Any model	REGULAR AVAILABILITY

Starting from January, STS400 and Matrix 410 ATS will be provided with the latest decoding software directly from production. The new decoding software - embedded in



the software release 6.65 – delivers several improvements resulting in a stronger reading performance, especially for tires applications.

NOTES

1. Existing Matrix products with VISISET software are not upgradable to DL.CODE software.
2. The WEBSENTINEL is not supported with the DL.CODE release 1.0. The WEBSENTINEL functionality will be available with the DL.CODE release 1.1 (2015Q2)
3. MATRIX N models report the DL.CODE logo, both on product housing and package.
4. DL.CODE software and product firmware will be available exclusively on www.datalogic.com. The DVD is not included in product package, but only available as separate PN:

93ACC0148 SW-DOCS-TEST CHART FOR MATRIX DL.CODE



PRODUCT AVAILABILITY

Purchase orders for the Matrix 300N and Matrix 410N will be accepted on

JANUARY 19nd, 2015

Product deliveries will start at the beginning of February 2015.

Please note that during the first 3 months of introduction, the delivery time could be affected by slight delays.

SALES CONDITIONS

List price	Please refer to the Corporate End User Price List
General Conditions	Standard conditions for Datalogic Product and Accessories

DEMO UNITS to Elite Quality Partners, Quality Partners, System Integrators, and Solution Providers: EQP/QP, SI's, SP's can buy samples with privileged conditions as specified in their agreements.

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