

## DATALOGIC MATRIX 300N IMAGER

**\*\*OBSOLETE - Please contact [vision@oem.co.uk](mailto:vision@oem.co.uk)  
for possible replacements\*\***

MATRIX300N712010

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more information\*\***

- 1.3 MP and 2 MP resolutions
- Detects 1D and 2D code types
- Upto 60 fps
- Integrated communication via Ethernet 10/100: Ethernet IP, TCP/IP, UDP, FTP, MODBUS TCP, RS232/RS422/RS485 On-board PROFINET-IO as standard



### PRODUCT DESCRIPTION

The MATRIX300N has been made obsolete and superseded by [MATRIX320N 2MP](#) OR [MATRIX220 X 1.2MP](#). Please contact [vision@oem.co.uk](mailto:vision@oem.co.uk) for direct replacements.

Matrix 300N™ is the next-generation, compact imager in the Matrix family. This high resolution sensor has ultra-fast image acquisition, at 1.3 megapixel and a frame rate of 60 frames per second. The Matrix 300N™ is ultra-compact, purpose built for superior performance on high speed and Direct Part Marking (DPM) applications.

For the electronic focus control the optical system incorporates a liquid lens module, as a result the reader offers automatic focus adjustment without the addition of moving parts.

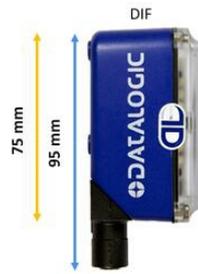
The innovative design of integrated illuminators embedded over the entire front surface allows for bright, uniform illumination. Suitable for illumination on normal, etched, reflective or textured surfaces due to the lighting design using both bright and dark field patterns.

The small dimensions of the Matrix 300N™ and rotating connector makes it ideal for integrating into small, tight spaces, as well as the M12, 4 pole connections making for easy integration into existing systems.

Additionally the compact flexible design offers cost effective communication options with Power over Ethernet (POE) connection through standard ethernet connection. other connectivity options include PROFINETIO and ETHERNET/IP, eliminating external communication boxes or converters.

## TECHNICAL DATA

<b>1D Code types</b>	Auto discriminates all standard 1D codes
<b>2D Code Types</b>	Aztec Code, Data Matrix, MaxiCode, Micro QR Code, QR Code, Dot Code
<b>Colour LED</b>	Red
<b>Digital inputs</b>	2
<b>Digital outputs</b>	3
<b>Dimension (mm)</b>	95 x 54 x 45
<b>Distance max</b>	650 mm
<b>Distance min</b>	20 mm
<b>Frame rate max</b>	45 fps
<b>Integrated communication interface</b>	Ethernet 10/100 Mbit/s: Ethernet IP, Modbus TCP, Profinet IO, Serial RS232/RS422FD
<b>IP class</b>	IP65, IP67
<b>Material of body</b>	Aluminium
<b>Number of LEDs</b>	10
<b>Postal Code Types</b>	Planet Code, Postnet, Royal Mail Code (RM4SCC), Japan Postal
<b>Power consumption</b>	6 W
<b>Programming options</b>	DL.CODE, Host Mode programming, X-PRESS Human Machine Interface
<b>Readable code types</b>	1D / Linear Codes, 2D Codes, Postal Codes
<b>Sensor Type</b>	CMOS
<b>Storage temperature max</b>	70 °C
<b>Storage temperature min</b>	-20 °C
<b>Supply voltage</b>	10-30 V DC
<b>Temperature operational max</b>	45 °C
<b>Temperature operational min</b>	0 °C
<b>Weight</b>	250 g
<b>Viewing angle</b>	9mm (H:44°, V:34°, D:54°)



**Ethernet connector**

- ✓ Circular M12 4-pin Female Connector
- ✓ 10/100 Mbit/s
- ✓ Communication channels
  - TCP Client
  - TCP Server
  - UDP Channel
  - FTP Client
- ✓ Fieldbus protocols
  - EtherNet/IP
  - PROFINET IO
  - Modbus TCP Client

**Power - Serial Interfaces - I/O Connector**

- ✓ Circular M12 17-pin Male Connector (same interface of Matrix 300N and 410N)
- ✓ 10-30 VDC
- ✓ 1 Serial Main (RS232/RS422FD up to 115.2 kbit/s)
- ✓ 1 Serial AUX (RS232)
- ✓ ID-Net
- ✓ 2 Inputs
  - Opto-coupled and polarity insensitive
- ✓ 3 Outputs
  - Configurable NPN, PNP, PP
  - Short-circuit protected
  - Using CBX the first 2 outputs are Opto-coupled