MATRIX 210™

DATALOGIC

Matrix 210™ is the new Datalogic 2D reader offering extreme reading performance and integrated Ethernet in a ultra-compact housing.
Thanks to the WVGA image sensor, capturing up to 60 frames per second and to the powerful internal illuminator, Matrix 210™ offers extreme dynamic reading capability.
The unrivalled decoding libraries running on the new high speed hardware platform deliver superior reading robustness and impressive decoding rates, supporting high system throughput and so improving the overall production efficency.
The on-board Ethernet makes effective the transfer of both reading data and captured images, that can be easily and quickly uploaded on external PCs or servers, simply for storage or also for offline process analysis.
Compactness and straight - 90° optical options allow a perfect contact reading capability and a simple mechanical integration into narrow spaces.
Installation and maintenance are extremely easy thanks to the X-PRESS™ Interface with five LEDs bar graph and with the multi-function key for immediate access to relevant functions such as Aiming, Setup, Automatic Learning, Test Mode.
The Green Spot - projected onto the scanned object – provides an easy and real-time feedback of the reading status without any additional supervisory softwares.



HIGHLIGHTS

- Integrated Ethernet interface
- Ultra compact dimensions
- Outstanding decoding capability on 1D, 2D, Stacked and Postal symbologies
- Direct and 90° window models for smart mounting
- High performance on dynamic reading applications
- X-PRESS™ for easy and intuitive setup
- Optical aiming system
- USB connectivity
- ID-NET™ embedded high speed connectivity
- Region Of Interest Windowing for higher frame rate
- 10 to 30 VDC Power Supply

APPLICATIONS

Electronic
- PCB Board Tracking
- Electronic Products Tracking

Pharmaceutical & Chemical
- Pharmaceutical manufacturing and packaging
- Supply chain traceability

OEM
- Chemical & Biomedical Analysis Machines
- Access control systems

Self Service Systems (AT M , Kiosks)
- Print & Apply systems
- Document Handling



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TECHNICAL DATA

	Matrix 210 21x-1xx	Matrix 210 21x-0xx
Dimensions	50 x 25 x 45 mm (1.97 x 0.98 x 1.77 in)	54 x 32 x 45 mm (2.12 x 1.26 x 1.77 in)
Weight	WEIGHT 60g. (2.1 oz.) without cable	
Case Material	Aluminum alloy	
Operating Temperature	0 to 50 °C (32 to 122 °F)	
Storage Temperature	-20 to 70 °C (-4 to 158 °F)	
Humidity	90% non condensing	
Protection Class	IP65	
Optical Features	WVGA (752 x 480) CMOS Sensor with Global Shutter	
Frame Rate	60 frame/s	
Reading Window	Direct or 90°	
Reading Angles	Max. Pitch: ± 35°; Tilt: 0-360°	
Readable Symbologies	1D e 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, Maxicode, Aztec, Microglyph Postal: Royal Mail, Japan Post, Planet, Postnet and many more	
Communication Interfaces	RS232 + RS232/RS422/RS485 up to 115.2 Kbit/s ID-NET™ port up to 1 Mbps, USB 2.0 up to 921.6 Kbit/s	
Connectivity Modes	Pass Through, Master/Slave, Multiplexer, USB Point To Point	
Digital Inputs	Two SW programmable, optocoupled and polarity insensitive	
Digital Outputs	Two SW programmable optocoupled	
Device Programming	X-PRESS™ Human Machine Interface, Windows™ based SW (VisiSet™) via serial or USB link Serial Host Mode Programming sequences	
User Interface	X-PRESS™ Human Machine Interface, Beeper, Programmable Push Button, LEDs (Status, Com, Trigger,Good, Ready, Power On, Good read Spot)	
Code Quality Verification	ISO/IEC 16022 (Data Matrix), ISO/IEC 18004 (QR Code) ISO/IEC 15415 (Print quality test specifications for 2D codes) ISO/IEC 15416 (Print quality test specifications for linear codes) AS9132A (Data Matrix Quality Requirements for Parts Marking) AIM DPM (Global Direct Part Mark Quality Guideline)	
	Matrix 210 21x-x0x	**Matrix 210 21x-x2x**
POWER SUPPLY	10 to 30 VDC	5 VDC
POWER CONSUMPTION	3.6 W max; 3.0 W typ.	2.5 W max; 2.0 W typ.

MODELS

	P/N	Description	P/N	Description
SERIAL	937501026	MATRIX 210 211-100 WVGA-NEAR-25P-ST	937501038	MATRIX 210 211-000 WVGA-NEAR-90-25P-ST
	937501027	MATRIX 210 212-100 WVGA-MED-25P-ST	937501039	MATRIX 210 212-000 WVGA-MED-90-25P-ST
	937501028	MATRIX 210 213-100 WVGA-FAR-25P-ST	937501040	MATRIX 210 213-000 WVGA-FAR-90-25P-ST
	937501029	MATRIX 210 214-100 WVGA-UHD-25P-ST	937501041	MATRIX 210 214-000 WVGA-UHD-90-25P-ST
SERIAL ETHERNET	937501030	MATRIX 210 211-110 WVGA-NEAR-ETH-ST	937501042	MATRIX 210 211-010 WVGA-NEAR-90-ETH-ST
	937501031	MATRIX 210 212-110 WVGA-MED-ETH-ST	937501043	MATRIX 210 212-010 WVGA-MED-90-ETH-ST
	937501032	MATRIX 210 213-110 WVGA-FAR-ETH-ST	937501044	MATRIX 210 213-010 WVGA-FAR-90-ETH-ST
	937501033	MATRIX 210 214-110 WVGA-UHD-ETH-ST	937501045	MATRIX 210 214-010 WVGA-UHD-90-ETH-ST
USB	937501034	MATRIX 210 211-120 WVGA-NEAR-USB-ST	937501046	MATRIX 210 211-020 WVGA-NEAR-90-USB-ST
	937501035	MATRIX 210 212-120 WVGA-MED-USB-ST	937501047	MATRIX 210 212-020 WVGA-MED-90-USB-ST
	937501036	MATRIX 210 213-120 WVGA-FAR-USB-ST	937501048	MATRIX 210 213-020 WVGA-FAR-90-USB-ST
	937501037	MATRIX 210 214-120 WVGA-UHD-USB-ST	937501049	MATRIX 210 214-020 WVGA-UHD-90-USB-ST

READING CHARACTERISTICS

MODELS	FOCUS DISTANCE	FIELD OF VIEW @ FOCUS DISTANCE	PPI@ FOCUS DISTANCE	TYP. 1D AND STA-CKED CODE RESOLUTION	2D CODE RESOLUTION		READING DISTANCE	
	mm (in)	mm (in)		mm (mils)	mm (mils)	mm (in)	Min.	Max.
MATRIX 210 214-xxx UHD	30 (1.38)	16.5 x 10.5 (0.65 x 0.41)	1150	0.063 (2.5)	Typ.	0.076 (3)	28 (1.10)	32 (1.26)
					Max.	0.13 (5)	23 (0.91)	38 (1.50)
MATRIX 210 211-xxx UHD	45 (1.77)	35 x 22 (1.38 x 0.87)	545	0.10 (4)	Typ.	0.13 (5)	42 (1.65)	53 (2.08)
					Max.	0.19 (7.5)	36 (1.42)	61 (2.40)
MATRIX 210 212-xxx MEDIUM	65 (2.56)	50 x 32 (1.97 x 1.26)	380	0.15 (6)	Typ.	0.19 (7.5)	54 (2.13)	90 (3.54)
					Max.	0.25 (10)	47 (1.85)	101 (3.97)
MATRIX 210 213-xxx FAR	105 (4.13)	80 x 50 (3.15 x 1.97)	238	0.20 (8)	Typ.	0.25 (10)	85 (3.35)	135 (5.31)
					Max.	0.38 (15)	70 (2.76)	192 (7.55)

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