MATRIX 450N™

MATRIX 450N™ is the high-end industrial 2D reader designed for logistic applications. Through 5 million pixels captured 15 times in a second, **MATRIX 450N™** enables a range of applications never covered before by a 2D-Imager. **MATRIX 450N™** perfectly meets the requirements of both automated and manual material handling.

Thanks to the extraordinary acquisition rate at very high resolution and the strong illuminator, it is the perfect solution for high speed transportation on small and middle size conveyors. PACTRACK™ capability allows the Matrix 450™ to minimize the gap between objects and increase the system productivity. With Matrix 450N™ multiple reading attempts are no longer needed: the large area coverage in a single shot permits the highest throughput and maximum ease of use. Some additional features - continuous frame acquisition, no-flashing white illumination, colored spot indicators - actually make **MATRIX 450N™** the unprecedented solution for operator attended applications, as manual object presentation in overhead scanning mode or manual conveyor loading.

The **ID-NET™** readers clustering permits to effectively extend the reading area for single-side and multi-side applications. Captured image are stored on-board and optionally transferred to external supports through the integrated Gigabit Ethernet connectivity.

No moving parts, rugged metal construction, IP65 enclosure rate and operative temperature up to 50°C guarantee a long life cycle even in harsh industrial environments.

5MP Sensor
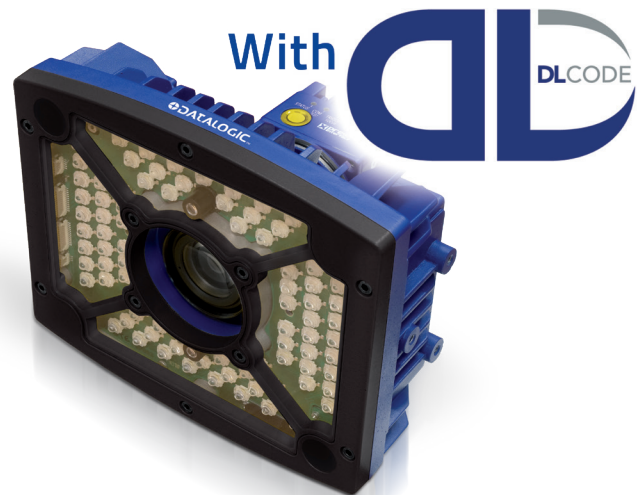*Ultra Large FOV*

Adjustable Focus

Xpress interface
Ease of use

Continuous High Power

Aiming System

With **DL.CODE**

HIGHLIGHTS

- 5MP image sensor, 15 FPS
- Gigabit Ethernet Integrated Connectivity
- Adjustable focus through C-Mount lenses
- White and Blue lighting options
- Continuous, no-flashing Lighting
- Colored spot indicators
- Outstanding decoding capability on 1D, 2D, Stacked, Postal symbologies
- Region Of Interest Windowing for higher frame rate
- PACKTRACK™ capability
- Blue Diamonds™ aiming and focusing system
- DL.CODE™ configuration SW and X-PRESS™ for easy and intuitive setup
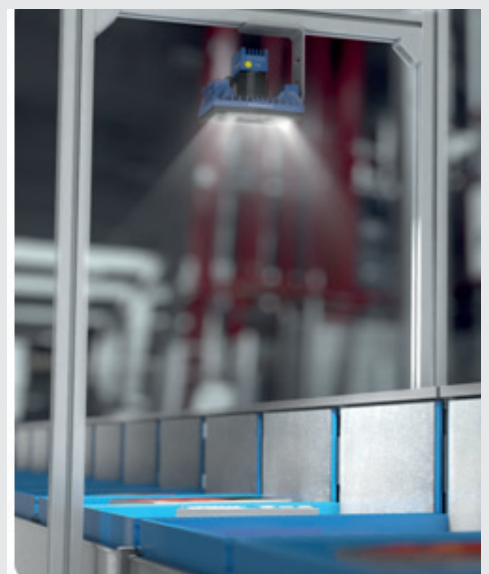- ID-NET™ embedded high speed connectivity

APPLICATIONS

Transportation & Logistic
- Automated sorting
- Manual Postal sorting

Distribution and Retail
- Order fulfillment and verification
- Multimedia sorting
- Reverse Logistics process

TECHNICAL DATA

PHYSICAL CHARACTERISTICS	
Dimensions	170 x 200 x 150 mm – 6.7 x 8.9 x 5.9 inches
Weight	3000 g. – 6.6 pounds (with lens)
Case material	Aluminum
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

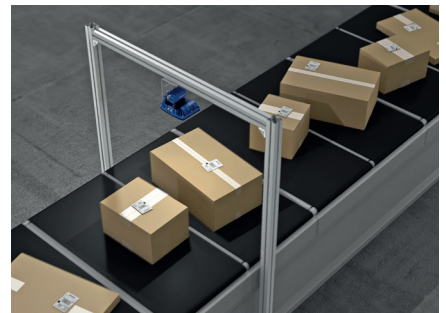| PERFORMANCE	
Optical features	2448 X 2050 CCD sensor
Frame rate	15 frames/s
Reading angles	Max. Pitch: ± 35°; Tilt: 0-360°
Readable symbologies	1D and Stacked: IL 2/5, Code 128, Code 39, EAN/UPC, PDF417, Micro PDF417, Pharmacode, GS1 DataBar (RSS) family, and many more. 2D: Data Matrix, QR Code, Micro QR, Maxicode, Aztec, Microglyph Postal: Royal Mail, Japan Post, Planet, Postnet and many more
Communication interface	RS232 + RS232/RS422/RS485 up to 115.2 Kbit/s Ethernet IEEE 802.3z 1000BaseT compliant ID-NET™ port up to 1 Mbps
Connectivity modes	Pass Through, Master/Slave, Multiplexer, Ethernet point to point
Digital inputs	Two SW programmable, optocoupled and polarity insensitive
Digital outputs	Two SW programmable, optocoupled
Programming method	X-PRESS™ Human Machine Interface Windows™ based SW (DL.CODE™) Ethernet link
User interface	X-PRESS™ Human Machine Interface Beeper, Programmable Push Button, LEDs (Status, Com, Trigger, Good, Ready, Power on, Network presence, Good read Spot)

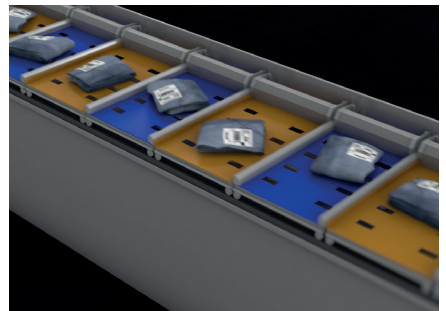| ELECTRICAL CHARACTERISTICS	
Power supply	24 Vdc±20%
Power consumption	2,5 A (0,5A Matrix 450N , 2A LT-03x)

MODELS & ACCESSORIES

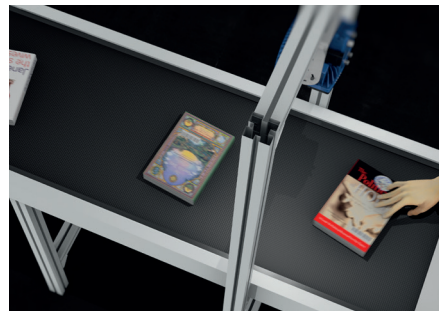|	ORDER NO.	DESCRIPTION
Reader base	937400046	MATRIX 450N 800-030 5MP GIGE
Lighting	93A400032	LT-030 ULTRA POWER LT SUPERNARROW BLUE
	93A400033	LT-031 ULTRA POWER LT SUPERNARROW WHITE
	93A400034	LT-032 ULTRA POWER LT NARROW BLUE
Lens	93ACC0041	LNS-1216 16MM C-MOUNT LENS 5MP
	93ACC0034	LNS-1225 25MM C-MOUNT LENS 5MP
	93ACC0035	LNS-1235 35MM C-MOUNT LENS 5MP
	93ACC0036	LNS-1250 50MM C-MOUNT LENS 5MP
Accessories	93A050032	CAB-LD-002 LT DRIVER +PWR 0.2M
	93A050044	CAB-LD-102 LT DRIVER NO PWR 0.2M
	93A050033	CAB-LP-03 LIGHTING POWER 3M
	93A050037	CAB-LP-05 LIGHTING POWER 5M
	93A050034	CAB-GE01 M12-IP67 TO RJ45 1M
	93A050035	CAB-GE03 M12-IP67 TO RJ45 3M
	93A050036	CAB-GE05 M12-IP67 TO RJ45 5M
	93A050043	CAB-PG-0105 VDC PWR PG120-M450 5M
	93ACC1870	CAB-PG-0002 VDC PWR PG120-IDNET 2M
	93ACC0046	PG-120-K01 PWR SUPPLY KIT FOR M450 (EU)
	93ACC0047	PG-120-K02 PWR SUPPLY KIT FOR M450 (UK)
	93ACC0048	PG-120-K03 PWR SUPPLY KIT FOR M450 (US)

Manual Postal sorting

Automated sorting

Order Fulfilment and verification

Manual Loading

CE