>MATRIX 450™

High Performance 2D Imager

Transportation and Logistics Industry

◆DATALOGIC

THE VISION IS YOURS

THE INDUSTRY'S MOST POWERFUL 2D IMAGER

HIGH RESOLUTION
5 Megapixel CCD Image Sensor, capturing at the frame rate of 15 images/s with on-board image saving.

Laser aiming system for fast and precise reader positioning during installation.

Ultra-powerful lighting using 96 LEDs, providing superior performance on high speed packages and a large intrinsic DOF (depth-of-field) with a fixed focus lens.

Operator feedback is provided by a **Green Spot** projected on the scanned object to validate in real-time a successful reading result.

Ethernet is Gigabit.
Data and images are transferred at an accelerated speed of **1,000 megabit/s**

Accessing the Optical Lens for adjustment is extremely easy, no need to separate the reader from the illuminator.

MODELS AND ACCESSORIES

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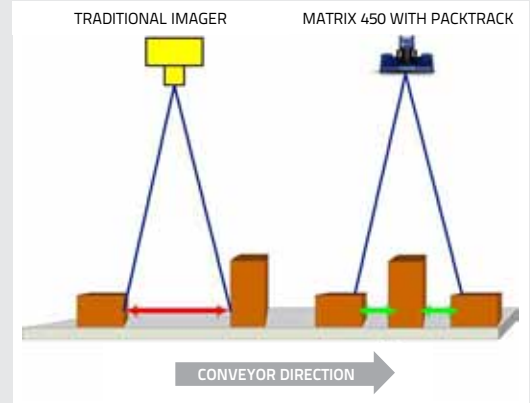| MATRIX 450™		
READER BASE	937400024	MATRIX 450 800-030 5MP GIGE
LIGHTING	93A400032	LT-030 ULTRA POWER LT SUPERNARROW BLUE
	93A400033	LT-031 ULTRA POWER LT SUPERNARROW WHITE
	93A400034	LT-032 ULTRA POWER LT NARROW BLUE
LENS	93ACC0041	LNS-1216 16MM C-MOUNT LENS 5MP
	93ACC0034	LNS-1225 25MM C-MOUNT LENS 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
	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)
	93A050043	CAB-PG-0105 VDC PWR PG120-M450 5M
	93ACC1870	CAB-PG-0002 VDC PWR PG120-IDNET 2M
	93ACC0086	EMK-MTX-380 EXT.MIRROR (380MM)
	93A100027	DATALOGIC WEBSENTINEL-IMAGES-005 5 ARRAYS
	93A100028	DATALOGIC WEBSENTINEL-IMAGES-064 64 ARRAYS
	93A100029	DATALOGIC WEBSENTINEL-IMAGES-256 256 ARRAYS
	93A100027	DATALOGIC WEBSENTINEL-IMAGES-005 5 ARRAYS

MATRIX 450™ - TRANSPORTATION AND LOGISTIC INDUSTRY

SMALL GAP & HIGH THROUGTHPUT SORTATION

PackTrack, patent pending software algorithms, solve sorting applications for 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.**

With PackTrack, the Matrix 450™ acquires **images of an object during the entire transit** through the reading zone, **under conditions that are generally not managed by imagers.**

PackTrack results in multiple acquisitions of the same bar code resulting in increased reading performance.

TRADITIONAL IMAGER   MATRIX 450 WITH PACKTRACK

CONVEYOR DIRECTION

PackTrack increases the ease of installation and eliminates the need of fine tuning imager synchronization and integration into the conveyor and control systems:

Easy to use with no adjustments

Trigger Line

Transmission Line

1. Image acquisition is free running, no need for timing control.

2. Trigger (TR) position and transmission line (TX) position are configurable, based on time or encoders.

3. Multiple objects are managed simultaneously.

4. PackTrack works on any Matrix arrayed configuration, for multiple heads stations and multiple side reading.

MATRIX DECODES IMPOSSIBLE TO READ CODES

Every no read has a cost for manual handling. The matrix 450™ provides opertional cost savings by reading the most challenging codes.
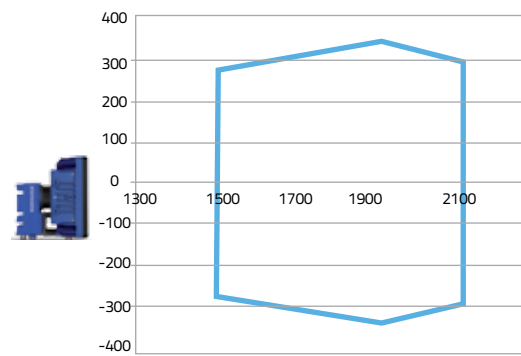
Torn	Folded

HUGE DOF AT HIGH SPEEDS

Code: 1D **0.38 mm** (15 mils),
Speed: up to **2.8 m/s** (551 ft/min)
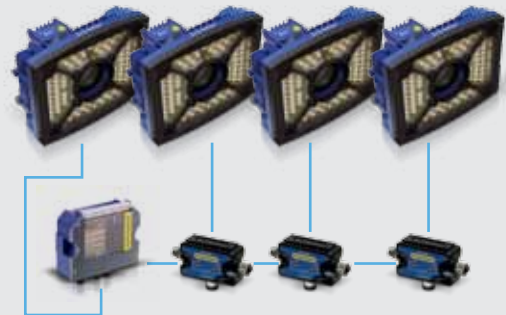**Real Time DOF: 600 mm (24 in)**

With no focus change or object height measurement!

OPTIMAL SYSTEM COMPOSITION FOR ANY APPLICATION

Datalogic ID-NET clustering allows a simple modular composition of multi-reader stations.

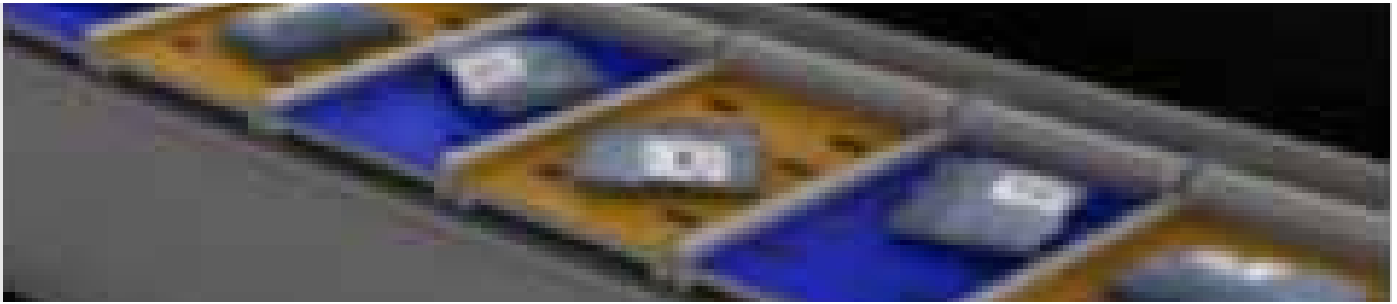PackTrack is supported in multi-head configurations and ID-NET guarantees perfect reader synchronization!
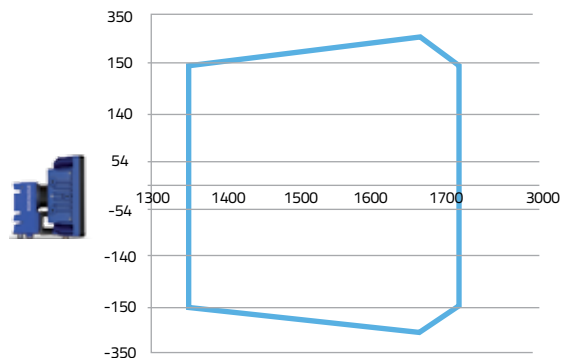

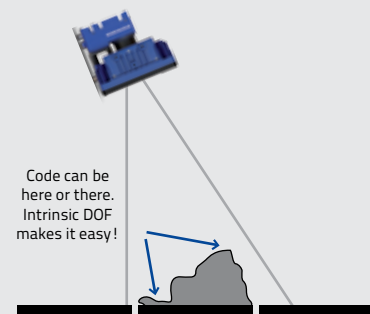
Under Plastic

On Polybags

PERFECT READING CAPABILITIES FOR E-COMMERCE APPLICATIONS

- Code: 1D - 0.30 mm (12 mils)
- SPEED: up to 2.3 m/s (453 ft./min)
- Real time DOF: 350 mm (14 in)

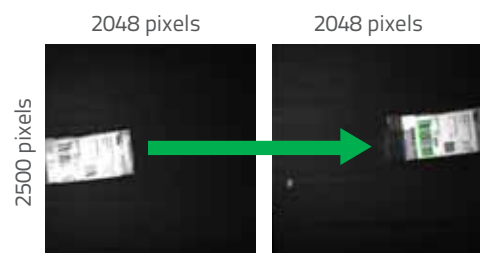| | 1300 | 1400 | 1500 | 1600 | 1700 | 3000 |

(350, 150, 140, 54, -54, -140, -150, -350)

LEAN AND EASY INTEGRATION ACROSS THE CONVEYOR SYSTEM

- Matrix reading is extremely robust for irregularly shaped objects like bags or totes. With real-time DOF, the Matrix reads codes on any location of irregularly shaped objects.

- High performance static lensing provides continuous DOF. A superior technology to dynamic focus adjustment systems.

- Reduce integration cost and complexity by eliminating object height barriers or devices.

Code can be here or there. Intrinsic DOF makes it easy!

IMMUNE FROM LIGHTING REFLECTIONS, PROVIDING EXCELLENT READING PERFOMANCE FOR BAR CODES UNDER PLASTIC OR ON SHINY MATERIALS

Large image area coverage providing multiple captures of any single barcode from different perspectives.

2048 pixels   2048 pixels

2500 pixels

SIMPLE READER INTEGRATION OVER TRAY CONVEYORS WITH 2D PACKTRACK SOFTWARE

Image capture can be taken with no synchronization with respect to the trays in transit. With PackTrack each single picture can include more than one tray and still provide precision output for sortation.
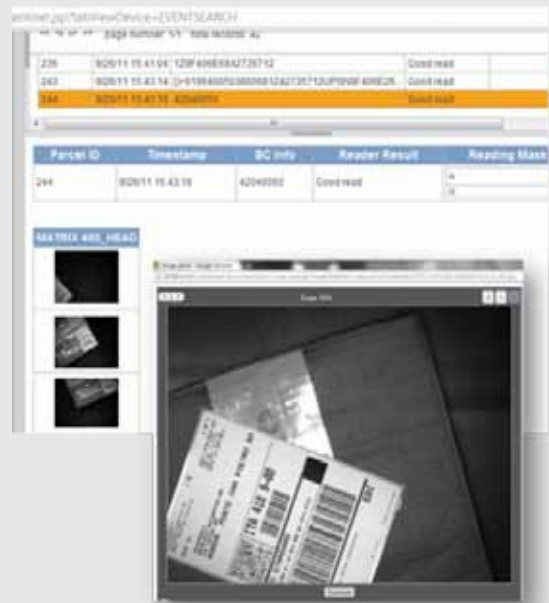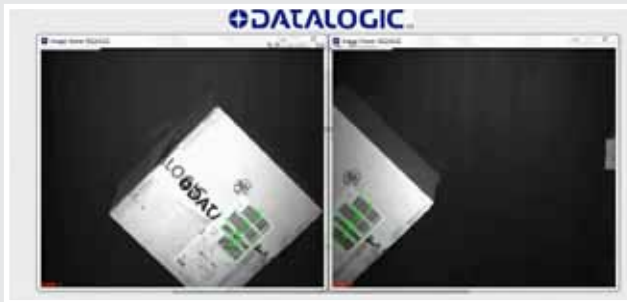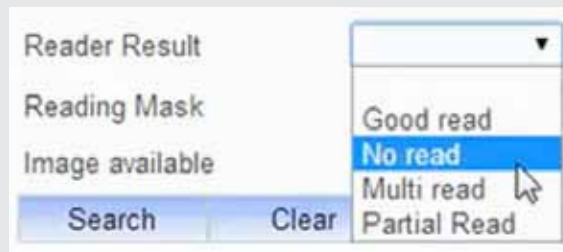
IMAGE MANAGEMENT

IMAGE MANAGEMENT FOR OPERATIONAL ANALYSIS

MATRIX 450™ OFFERS SEVERAL OPTIONS FOR IMAGE MANAGEMENT

Real time image visualization on a web page:

Datalogic WebSentinel™-IMAGES–
the web based supervisory
software to archive No Read
images for later review.

On board image storage:

60x
full frame images

236x
1: 4 rescaled images

944x
1:16 rescaled images

Images can be transferred through standard FTP tools or the WebSentinel software.

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