

# PRODUCTS



> Identification



# IMAGE BASED BAR CODE READERS

## APPLICATIONS

### MATRIX 450™

#### Transportation and Logistics

- Automated sorting
- Manual postal sorting
- Loading / unloading

#### Distribution & Retail

- Order fulfillment and verification
- Multimedia sorting
- Reverse logistic processes
- Static scanning

### NVS9000/AV6010™

#### Transportation and Logistics

- Postal and courier express sorting
- Revenue recovery
- Reverse logistic processes

#### Distribution & Retail

- Large distribution centres
- Multimedia sorting
- Receiving / shipping systems

## HIGHLIGHTS

### MATRIX 450™

- Very large reading area, FOV and DOF
- Outstanding dynamic reading capabilities, up to 3.2 m/s on 0.30 mm resolution 1D code
- White and Blue illumination options
- Continuous Illumination High Power Mode, no-flashing lighting
- Colored spot indicators projected into the scanning area
- Outstanding decoding capability on any code type: 1D, 2D, Stacked, Postal symbologies
- Precise Laser Spot Aiming system
- ID-NET™ readers clustering to extend the reading area coverage on single side and multi-side applications
- Persistent Image Saving on specific reading results (No Read) for diagnostics or reporting

### NVS9000™

- Extended field of view: 1400mm (55")
- Excellent reading performances on high speed conveyors: 4.8m/s (945fpm)
- Reduced system dimensions: 2.2m (7ft)
- Easy installation and maintenance
- Integration with dimensioning and scale system
- Multiside reading tunnel (6 side reading)

### AV6010

- Integrated certified dimensioning
- Side by Side package detection
- Image saving
- Integrated camera unit

## TECHNICAL DATA

### MATRIX 450™

- 5MP image sensor, 15 FPS
- Gigabit Ethernet Integrated Connectivity
- C-Mount Lenses, focal length: 16 mm, 25 mm, 35 mm, 50 mm
- Data output: RS232/RS485, Ethernet
- I/O: 2 inputs, 2 outputs; optocoupled
- Protection class: IP65
- Operating temperature: 0°C to 50°C
- Supply Voltage: 24 Vdc  $\pm$  20%

### NVS9000™

- CCD sensor: 8192 pixels
- Image resolution: 110-260DPI (application dependant)
- Scan rate: 33KHz
- Readable symbologies: all standard 1D and 2D codes
- Connectivity: decoded label, high quality images
- Connectivity: RS232/RS485, Ethernet
- Video output: Gigabit Ethernet, CC-Link
- Protection class: IP65
- Operating temperature: 0°C to 50°C

### AV6010

- CCD sensor: 8192 pixels
- Resolution 250 DPI
- Readable symbologies: all standard 1D and 2D codes
- Connectivity: Gigabit Ethernet, Serial RS232/422
- Operating system: Linux
- Operating Temperature 0°C to 50°C
- Scan rate: 19.1 KHz



MATRIX 450™



AV6010



NVS9000™



# IMAGE BASED BAR CODE READERS

## APPLICATIONS

### MATRIX 210™

#### Electronics

- PCB board tracking
- Electronic product tracking

#### Medical & pharmaceutical

- Medical device traceability
- Pharmaceutical supply chain traceability

#### OEM

- Chemical & biomedical analysis
- Access control systems
- Self service systems (ATM, kiosks)
- Print & apply systems
- Document handling

### MATRIX 300™

#### Manufacturing, Electronics and Automotive

- DPM code validation after marking
- Work-in-progress control
- Parts and assemblies traceability

#### Food and Beverage

- Work-in-progress traceability

#### Document Processing

- High speed process control

#### Medical

- Medical device traceability

#### Clinical Lab Automation

- Biomedical analysis machines
- Specimen collection machines

### MATRIX 410™

#### Automotive

- DPM reading and verification

#### Electronics

- PCB board tracking
- Electronic product tracking

#### Distribution & retail industry

- Presentation scanner
- Small objects sorting
- Warehouse applications

#### Medical & pharmaceutical

- Medical device traceability
- Pharmaceutical supply chain traceability

#### Food & beverage

- Work-in-progress traceability
- Code quality control

## HIGHLIGHTS

### MATRIX 210™

- WVGA sensor resolution, 60 frames/s
- Ultra-compact mechanical dimensions
- Direct or 90° reading window
- ESD safe option, YAG laser protection
- Code quality verification capability
- High speed integrated Ethernet for real time image transfer
- USB connectivity (MATRIX 210™)
- Extreme Industrial grade: IP65
- 0-50°C operating temperature
- Image saving and transfer capabilities (FPT protocol)

### MATRIX 300™

- Ultra-compact reader, rotating connectors
- High performance DPM reading
- Liquid lens electronic focus control
- Integrated dual illuminator: dark field/ bright field
- Fast and high resolution image sensor: 1.3 megapixels, 'true' 60 frame/s
- Power over Ethernet Option
- Extreme Industrial grade: IP67, 0-50°C operating temperature
- Precise dual laser aiming system
- Code quality verification capability
- Image saving and transfer capabilities (FPT protocol)

### MATRIX 410™

- 1,3 (SXGA) & 2,0 (UXGA) megapixels models
- Adjustable focus through C-Mount lenses
- High performance reading on 1D, 2D, Stacked, Postal symbologies
- Blue Diamonds™ aiming and focusing system
- X-PRESS™ for easy and intuitive setup
- ID-NET™ embedded high speed connectivity
- Code Quality Verification Capability
- High speed integrated Ethernet for real time image transfer
- Extreme Industrial grade: IP67, 0-50°C operating temperature
- Image saving and transfer capabilities (FPT protocol)

## TECHNICAL DATA

### MATRIX 210™

- Extremely compact dimensions: 50x25x45mm & 54x45x32mm
- High speed integrated Ethernet for real time image transfer
- CMOS matrix sensor
- WVGA image resolution
- Read rate: up to 60frames/s
- Object speed: up to 2.0m/s
- Connectivity: RS232, RS485, USB, EtherNet IP, Ethernet TCP/IP
- I/O: 2 inputs, 2 outputs; optocoupled
- Power supply: 10 to 30VDC
- Protection class: IP65

### MATRIX 300™

- Compact Mechanical Dimensions: 94x54x43 mm & 74x54x63 mm
- Rotating Connectors
- Electronic Focusing Lens Control
- Multi-Pattern Embedded Illuminators
- CMOS matrix sensor
- SXGA image resolution
- Image frame rate: 60 frames/s
- Connectivity: RS232, RS485, EtherNet IP, Ethernet TCP/IP
- I/O: 2 inputs, opto-coupled, 3 outputs, programmable PNP/NPN.
- Power supply: 10 to 30VDC; 8W max. Power over Ethernet option
- Protection class: IP67

### MATRIX 410™

- High speed integrated Ethernet for real time image transfer
- CMOS/CCD matrix sensors
- SXGA/UXGA image resolution
- Read rate: up to 27frames/s
- Object speed: up to 6.0m/s
- Connectivity: RS232, RS485, EtherNet IP, Ethernet TCP/IP
- I/O: 2 inputs, 2 outputs; optocoupled
- Power supply: 10 to 30VDC; 8W max.
- Protection class: IP67



MATRIX 210™



MATRIX 300™



MATRIX 410™



# LASER BASED BAR CODE SCANNERS

## APPLICATIONS

### TC1200 / DS1100

- Access control systems
- ATL (Automated Tape Libraries)
- Self service systems (ATM, kiosks)
- OEM integration in automatic machines
- Game automation (Lotto, Lottery, etc.)
- Chemical and blood analysis machines
- Print & apply systems
- Film processing machines

### DS1500 / DS2200

- OEM integration in automatic machines
- Chemical and biomedical analysis machines
- Document handling machines
- Print & apply systems
- High speed pharmaceutical packaging
- Packaging machines
- ATL (Automated Tape Libraries)

### DS6300 / DS6400

- Automated warehousing
- Electronic industry manufacturing
- Shopfloor on automotive, electric appliances, food & beverage
- Sorting on logistic and distribution lines
- Omni-sorting on small conveyors

## HIGHLIGHTS

### TC1200

- Cost-effective
- Embedded code reconstruction software
- Very high density code reading (up to 0.1mm / 4mils)
- Scanner and scan engine version
- No moving part (MTBF>200.000 hours)
- Designed for OEM integration

### DS1100

- Cost-effective
- Direct or 90° reading window
- Motor on/off SW control
- Designed for OEM integration

### DS1500

- Extremely compact size
- Excellent reading capabilities
- Designed for OEM integration
- ACB™ Advanced Code Builder
- Motor on/off SW control

### DS2200

- Compact dimensions
- Excellent reading capabilities for high density codes
- Designed for OEM integration
- Very high density code reading (up to 0.076mm / 3mils)

### DS6300 / DS6400

- Adjustable or Flash™ (Dynamic) laser optics
- Step-A-Head™ feature
- ACR4™ Advanced Code Reconstruction
- Integrated oscillating mirror models available
- Built-in connectivity to Ethernet/Devicenet/Profibus networks
- PackTrack™ tracking system
- Embedded display and keypad
- Multilanguage Genius™ configuration tool

## TECHNICAL DATA

### TC1200

- CCD reader
- Scan rate: up to 320scans/s
- Reading range: 50 to 430mm
- Max. resolution: 0.1mm (4 mils)
- RS232 and USB model
- Power supply: 5VDC, 2W max.

### DS1100

- Scan rate: up to 500scans/s
- Reading range: 10 to 220mm
- Max. resolution: 0.127mm (5mils)
- Motor on/off via software commands
- Power supply: 5VDC, 2W max.
- Protection Class: IP65

### DS1500

- Dimensions: 40x30x22mm
- Scan rate: up to 1200scans/s
- Reading range: 40 to 240mm
- Max. resolution: 0.10mm (4mils)
- Test mode with bar graph
- Power supply: 5VDC, 2W max.
- Protection class: IP65

### DS2200

- Dimensions: 50x40x28mm
- Scan rate: 500scans/s (1000scans/s on demand)
- Reading range: 50 to 200mm
- Max. resolution: 0.076mm (3mils)
- Power supply: 5VDC, 2W max.
- Protection class: IP65

### DS6300 / DS6400

- Optics: adj. (DS6300) Flash™ (Dynamic) (DS6400)
- Scan rate: Up to 1200scan/s
- Reading range: 300 to 2000mm (DS6300) 300 to 2500mm (DS6400)
- Max. resolution: up to 0.2mm (8mils)
- Connectivity: RS232, RS485, EtherNet IP, Ethernet TCP/IP
- I/O: 4 inputs, 3 outputs; optocoupled
- Power supply: 15 to 30VDC, 15W max.



# LASER BASED BAR CODE SCANNERS

## APPLICATIONS

### DS8100A / DX8200A

- Postal and courier automatic parcel sorting and tracking
- Goods sorting and tracking in distribution centers
- Baggage handling systems in airport facilities
- Parcel identification in DWS systems (cubing, weighing and data capture)
- Cargo applications
- Loading/unloading systems

### AXIOM

- Postal/Parcel sorting and tracking
- Automated warehousing identification systems
- Airport baggage sorting systems
- Cargo applications
- Receiving / shipping systems

### AXIOM-X

- Postal/Parcel sorting and tracking
- Automated warehousing identification systems
- Airport baggage sorting systems
- Cargo applications
- Receiving / shipping systems

## HIGHLIGHTS

### DS8100A / DX8200A

- Market benchmark for fixed position laser scanners
- ASTRA™ multi-laser electronic focusing system
- Automatic bar code distance measurement
- ACR4™ Advanced Code Reconstruction
- PackTrack™ tracking system
- Ambient light immunity
- Display & keypad
- Built-in connectivity to Ethernet, Profibus

### AXIOM

- Scanning over 1,2, or 4 read zones for the largest reading zones
- DRX barcode reconstruction software for reading skewed barcode labels
- Modular scan head and wiring base for simple replacement
- Parameter storage modules makes replacement quick and easy
- Flexible Connectivity

### AXIOM-X

- Omni-directional scanning
- Highest Read performance
- Largest Coverage
- Fastest Installation
- Easy 'Plug and Play' replacement

## TECHNICAL DATA

### DS8100A

- Laser pattern: single
- Scan rate: 1000scans/s
- Reading range: 500 to 2000mm
- Max. resolution: 0.2mm (8mils)
- Dimensions: 215.5x170.5x126.5mm (8.5x6.7x5.0in)
- Protection class: IP64 (IP65 optional)
- Operating temperature: 0°C to 50°C

### DX8200A

- Laser pattern: cross
- Scan rate: 1000scans/s (500scans/s on each scan line)
- Reading range: 500 to 1500mm
- Max. resolution: 0.2mm (8mils)
- Dimensions: 470x300x147mm (18.5x11.8x5.78in)
- Protection class: IP64 (IP65 optional)
- Operating temperature: 0°C to 50°C

### AXIOM

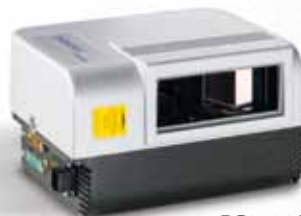
- Laser pattern: single
- Scan rate: 1400 scans/s
- Reading range: 380mm to 1830mm
- Dimensions: 158mm x 276mm x 132mm
- Protection class: IP65
- Operating Temp: 0°C to 50°C
- Connectivity: RS232/RS422, Ethernet TCP/IP, EtherNet IP, DeviceNet, ProfiBus

### AXIOM-X

- Laser pattern: cross
- Scan rate: 1120 scans/s
- Reading range: out to 2032mm
- Dimensions: 311mm x 354mm x 176mm
- Protection class: IP654
- Operating Temp: 0°C to 50°C
- Connectivity: RS232/RS422, Ethernet TCP/IP, EtherNet IP, DeviceNet, ProfiBus



DX8200A



DS8100A



AXIOM-X



AXIOM

# LASER BASED BAR CODE SCANNERS

## APPLICATIONS

### DS2100N / DS2400N

#### Automated warehousing

- Conveyor sorting
- Picking systems
- Automated storage and retrieval systems
- Tote Reading

#### Automated Shopfloor

- Item and part tracking
- Process control and packaging
- Packaging and compliance

#### OEM

- High speed document handling machines
- Print & apply systems
- Automatic chemical and biomedical analysis machines
- Reverse vending machines (can and bottle recycling)

### DS4800

#### Automated warehousing

- Medium/small conveyor sorting
- Pallet reading
- Automated storage and retrieval systems
- Picking systems
- Receiving / shipping systems
- Low temperature warehouses

#### Automated Shopfloor

- Item and part tracking
- Process control systems
- Overall production traceability
- Packaging and compliance

### AL5010

#### Automated warehousing

- Picking systems
- Pallet reading
- Label print and apply verification
- Receiving / shipping systems
- Automated storage and retrieval systems
- Process control systems

## HIGHLIGHTS

### DS2100N / DS2400N

- Compact, high performance readers
- Subzero model (-35°C)
- Intuitive X-PRESS™ human machine interface
- ID-NET™ embedded interface for high speed communication network
- ACR Lite Advanced Code Builder
- Direct and 90° reading window
- Ambient light immunity
- Multilanguage Genius™ configuration tool
- All 1D codes including GS1

### DS4800

- Manually adjustable focus with locking
- Ambient light immunity for outside applications
- Integrated multi-language display for setup, monitoring, and diagnostics
- Subzero model (-35°C) with window defrost
- ACR4™ Advanced Code Reconstruction
- Integrated oscillating mirror model available
- ID-NET™ embedded interface for high speed communication network
- All 1D codes including GS1

### AL5010

- Largest depth of field of any mid-range laser barcode reader on the market
- PackTrack™ advanced tracking allows closer package spacing while maintaining package ID
- Integrated web server with monitoring support for iPhone and iPads
- Multi-language integrated GUI
- Easy "plug and play" replacement
- Flexible connectivity with on board EtherNet/IP, Ethernet TCP/IP

## TECHNICAL DATA

### DS2100N

- Scan rate: up to 1000scans/s
- Reading range: 30 to 310mm
- Max. resolution: 0.12mm (5mils)
- Power supply: 10 to 30VDC, 4W max.
- Protection class: IP65
- I/O: 2 inputs, 2 outputs; optocoupled

### DS2400N

- Scan rate: up to 1000scans/s
- Reading range: 60 to 600mm
- Max. resolution: 0.20mm (8mils)
- Power supply: 10 to 30VDC, 5W max.
- Protection class: IP65
- I/O: 2 inputs, 2 outputs; optocoupled
- Operating temperature:
  - -35°C to 45°C (subzero model)
  - 0°C to 45°C (standard model)

### DS4800

- Scan rate: up to 1000scans/s
- Reading distance: up to 1000mm on 0.50mm (20mils) codes
- Depth of field: up to 600mm on 0.50mm (20mils) codes
- Max. resolution: up to 0.20mm (8mils)
- Connectivity: RS232, RS485
- I/O: 2 inputs, 2 outputs; optocoupled
- Power supply: 10 to 30VDC; 6W max.
- Protection class: IP65
- Operating temperature: -35°C to 50°C (subzero model)
- 0°C to 50°C (standard model)

### AL5010

- Scan rate: up to 1200scans/s
- Depth of field: up to 1125mm on 0.50mm (20mils) codes
- Max. resolution: up to 0.20mm (10mils)
- Connectivity: RS232, RS485, EtherNet IP, Ethernet TCIP/IP
- I/O: 4 programmable relays, 3 to 60VDC; optocoupled (Enhanced Interface Module)
- Power supply: 12 to 30VDC; 25W max.
- Protection class: IP65
- Operating temperature: 0°C to 50°C



AL5010



DS2100N



DS2400N



DS4800



# DIMENSIONER

## APPLICATIONS

### DM3610

- Parcel revenue recovery
- Distribution Center spatial management
- Trailer load planning
- Automated shipping and manifesting systems



DM3610

## HIGHLIGHTS

### DM3610

- Certified for Legal for Trade applications
- Works for cuboidal, near-cuboidal, and irregular package flows
- Works for singulated and non-singulated package flows
- Use in multiple head configurations to reduce shadowing

## TECHNICAL DATA

### DM3610

- Accuracy of  $\pm 5\text{mm}$  at transport speeds up to  $3.1\text{ m/s}$
- Maximum box size  $2450\text{mm} \times 1200\text{mm} \times 900\text{mm}$  for a single head
- Operating temperature:  $0^{\circ}\text{C}$  to  $50^{\circ}\text{C}$
- IP 65

# CONNECTIVITY DEVICES

Wide range of connectivity for the identification product range with standard IP65 (NEMA4) protection class and operating temperature up to  $50^{\circ}\text{C}$ .

## CBX SERIES

- Simplified wiring to speed up installation
- Scalable and modular connectivity
- Base and extended models
- Modular field bus connectivity
- Optional backup/restore module
- Optional display
- Low temperature model

## QL SERIES

- Easy, fast, modular and cost-effective solution with 'plug-in connection'
- Ethernet TCP/IP and EtherNet IP (QL500)

## SC SERIES

- Protection class: IP65 (NEMA4)
- Operation temperature:  $0$  to  $50^{\circ}\text{C}$
- Network or cluster controller
- Dedicated data-collector for maximum reading performance
- Scalable and modular connectivity
- Backup/restore module
- Maximum compatibility and scalability
- Ethernet TCP/IP, EtherNet IP, Profibus, DeviceNet (QLM series)

## AL 5010 INTERFACE MODULES

- Simplified wiring for fast installation
- Connectivity for Ethernet TCP/IP, Ethernet IP
- Profibus, DeviceNet and other common networks (Enhanced)
- Supports high voltage relays offering mini-controller capability (Enhanced)
- Dimensions:  $93 \times 136 \times 65\text{mm}$  (Basic),  $134 \times 191 \times 67\text{mm}$  (Enhanced)
- Supply Voltage  $12\text{--}30\text{ VDC}$ ,  $25\text{ W Max}$



SC SERIES

CBX SERIES



QL SERIES



AL5010 INTERFACES MODULE

## HEADQUARTER

### Datalogic Automation Srl

Via Lavino, 265  
40050 Monte San Pietro - Bologna - Italy  
Tel. +39 051/6765611  
Fax +39 051/6759324  
info.automation.it@datalogic.com

### BRANCHES AND SALES OFFICES

## EUROPE BENELUX

### Datalogic Automation Benelux

Newtonweg 3  
4104 BK Culemborg  
The Netherlands  
Tel. +31 345/589489  
Fax +31 345/511419  
info.automation.nl@datalogic.com

## FRANCE

### Datalogic Automation Srl

Succursale en France  
Le Parc Technologique de Lyon  
333 cours du 3ème Millénaire - Le Pôle  
69800 Saint Priest  
Tél. +33 (0)4/72476180  
Fax +33 (0)4/72470721  
info.automation.fr@datalogic.com

## GERMANY

### Datalogic Automation Srl

Niederlassung Central Europe  
Carl-Zeiss Str. 31  
73230 Kirchheim/Teck  
Tel. +49 07021/509700  
Fax +49 07021/5097029  
info.automation.de@datalogic.com

## ITALY

### Datalogic Automation Srl

Via Lavino, 265  
40050 Monte San Pietro - Bologna  
Tel. +39 051/6765611  
Fax +39 051/6759324  
info.automation.it@datalogic.com

### Datalogic Automation Srl

### LASER MARKING

Via Le Gorrey, 10  
11020, Donnas - Aosta  
Tel. +39-0125-8128201  
Fax +39-0125-8128401  
info.automation.it@datalogic.com

Via Dell'Industria 20, 21018  
Sesto Calende - Varese  
Tel. +39-03319180601  
Fax +39-03319180601  
info.automation.it@datalogic.com

## SPAIN

### Datalogic Automation Iberia

Sucursal en España  
C/ Samontà, 21 Planta baja, Local 0  
08970 Sant Joan Despí - Barcelona  
Tel. +34 (0)93/4772059  
Fax +34 (0)93/4777272  
info.automation.es@datalogic.com

## NORDIC

### Datalogic Automation AB

Höjdrodergatan 21  
21239 Malmö - Sweden  
Tel. +46 (0)40/385000  
Fax +46 (0)40/385001  
info.automation.se@datalogic.com

## UNITED KINGDOM

### Datalogic Automation UK

Datalogic House  
Dunstable Road, Redbourn - Hertfordshire  
AL3 7PR  
Tel. +44 (0) 1582 791750  
Fax +44 (0) 1582 791769  
info.automation.uk@datalogic.com

## NORTH AMERICA

### Datalogic Automation Inc

511 School House Road  
Telford, PA 18969-1196 - United States  
Tel. +1-800-BAR-CODE or +1-215-723-0981  
Fax +1-215-721-5551  
info.automation.us@datalogic.com

### Datalogic Automation Inc

### MACHINE VISION

6301 Old Shakopee Road  
Minneapolis, MN 55438 - United States  
Tel. +1-952-996-9500  
Fax +1-952-996-9501  
info.automation.us@datalogic.com

## APAC

## AUSTRALIA-NEW ZEALAND

### Datalogic Automation Pty Ltd

Unit 130, 45 Gilby Road  
Mt Waverley - Victoria, 3149 - Australia  
Tel. +61 (0)3/95589299  
Fax: +61 (0)3/95589233  
info.automation.au@datalogic.com

## CHINA

### Datalogic Automation Asia Ltd

Floor 20, Room 2017, Building 2,  
16 West Nan San Huan Road  
Fengtai District, Beijing  
Tel: +86 (0)21-5836 6692  
Fax: +86 (0)21-5836 6695  
info.automation.cn@datalogic.com

Suite 1301, Hua Rong Plaza,  
1289 South Pudong Road, Pudong District  
Shanghai 200120  
Tel: +86 (0)21-5836 6692  
Fax: +86 (0)21-5836 6695  
info.automation.cn@datalogic.com

1108B, Blocks 5, Huayangnian Meinian Plaza,  
West Nanhai Road, Nanshan District  
Shenzhen  
Tel: +86 (0)755-8629 6779  
Fax: +86 (0)755-8628 1280  
info.automation.cn@datalogic.com

## JAPAN

### Idec Datalogic Co. Ltd

10-40, Mikuni-Honmachi 1-Chome,  
Yodogawa-ku, Osaka 532 0005  
Tel. +81(6) 6398/3200  
Fax +81 (6) 6398/3202  
www.idljp.com

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www.datalogic.com