



# LASER 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
- GS1 ready

### 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
- GS1 ready

### 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
- Reliability > 50,000 hours MTBF at 25°C

## 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 (20 mils) 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
- Reading distance: up to 1225mm on 0.50mm (20mils) codes
- Depth of field: up to 1125mm on 0.50mm (20 mils) 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

# LASER BAR CODE SCANNERS

## APPLICATIONS

### DS6300 / DS6400

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

### DS8100A / DX8200A

- Postal and courier automatic parcel sorting and tracking
- Good 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 systems
- Automated warehousing identification systems
- Airport baggage sorting systems
- Cargo applications
- Receiving / shipping systems

### AXIOM-X

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

## HIGHLIGHTS

### 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

### 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

### DS6300 / DS6400

- Optics: adjustable (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
- I/O: 4 inputs, 3 outputs; optocoupled
- Power supply: 15 to 30VDC, 15W max.
- Protection class: IP64

### 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

### 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



DS8200A



DS8100A



DS6300  
DS6400



AXIOM-X



AXIOM

# LASER 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)

## 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)

## 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.

### 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



DS2200

TC1200



DS1500



DS1100





# IMAGE-BASED ID 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 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™ / MATRIX 410™

- High speed integrated Ethernet for real time image transfer
- CCD/CMOS based 2D readers for fixed industrial applications
- Compact industrial units integrating lighting, image capturing, decoding and communication
- Direct or 90° reading window
- Outstanding decoding capability on 1D, 2D, stacked and postal symbologies
- Excellent performance on DPM applications
- Code quality verification capability (ISO/IEC, AS9132A, AIM DPM)
- External illuminators available as accessories
- Intuitive X-PRESS™ human machine interface
- ID-NET™ embedded interface for high speed communication network
- Adjustable focus through C-Mount lenses (MATRIX 410™)
- Blue Diamonds™ aiming and focusing system (MATRIX 410™)
- USB connectivity (MATRIX 210™)

## TECHNICAL DATA

### MATRIX 210™

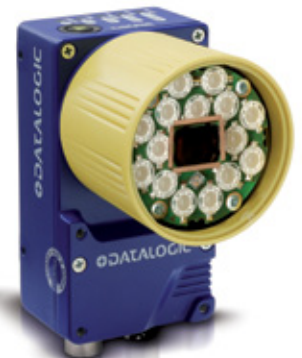
- Extremely compact dimensions: 50x25x45mm & 54x45x32mm
- High speed integrated Ethernet for real time image transfer
- CMOS matrix sensor
- WVGA image resolution
- Read rate: up to 60frames/s
- Object speed: up to 2.0m/s
- Connectivity: RS232, RS485, USB
- I/O: 2 inputs, 2 outputs; optocoupled
- Power supply: 10 to 30VDC, 3.6W max (serial models); 5Vdc; 2.5W max (USB models)
- Protection class: IP65

### 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
- I/O: 2 inputs, 2 outputs; optocoupled
- Power supply: 10 to 30VDC; 8W max.
- Protection class: IP67



MATRIX 210™



MATRIX 410™

# IMAGE-BASED ID READERS

## APPLICATIONS

### MATRIX 450™

#### Transportation & Logistic

- Automated sorting
- Manual postal sorting
- Loading / unloading

#### Distribution & Retail

- Order fulfillment and verification
- Multimedia sorting
- Reverse Logistics process
- Static scanning



MATRIX 450™

## HIGHLIGHTS

### MATRIX 450™

- Very large scanning 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

## 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 ± 20%

## APPLICATIONS

### NVS9000™

#### Transportation & logistics

- Postal and courier express sorting
- Revenue recovery

#### Distribution & retail

- Large distribution centres
- Multimedia sorting
- Reverse logistic processes (magazines)

### AV6010

- Postal/Parcel sorting and tracking
- Automated warehousing identification systems
- Receiving / shipping systems



AV6010

## HIGHLIGHTS

### 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

### NVS9000™

- CCD sensor: 8192 pixels
- Image resolution: 110-260DPI (application dependant)
- Scan rate: 33KHz
- Readable symbologies: all standard 1D and 2D codes
- Output data: decoded label, high quality images
- Data output: RS232/RS485, Ethernet
- Video output: Gigabit Ethernet, C-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
- Data output: Gigabit Ethernet, Serial RS232/422
- Operating system: Linux
- Operating Temperature 0°C to 50°C



NVS9000™

# DIMENSIONER

## APPLICATIONS

### DM3500

- Parcel revenue recovery
- AS/RS spatial management
- Trailer load planning
- Manifesting systems

## HIGHLIGHTS

### DM3500

- 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

### DM3500

- Accuracy of  $\pm 5\text{mm}$  at transport speeds up to 3.0 m/s
- Maximum box size 1830mm x 1220mm x 920mm for a single head
- Operating temperature:  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$
- IP 50



DM3500

## 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

### 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

### AL5010 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 x 136 x 65mm (Basic), 134 x 191 x 67mm (Enhanced)
- Supply Voltage 12-30 VDC, 25 W Max
- Fieldbus and high voltage relay modules available as options (Enhanced)

### QL SERIES

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



SC SERIES



CBX SERIES



QL SERIES



AL5010 INTERFACES MODULE

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