STATIONARY INDUSTRIAL SCANNERS







Product Guide





LASER BASED BAR CODE SCANNERS

APPLICATIONS

DS4800

Automated warehousing

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

Automated Shopfloor

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



DS5100

- Automotive: WIP Control. Parts Traceability
- Food & Beverage: Shipping Process, End of Line Palletizing
- Package Control
- Identification, Automatic Picking Process Control

Highlights

DS4800

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

Technical data

DS//800

- 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)

Manufacturing

- · Pharmaceutical: Secondary
- · Warehousing: Tote Tray

Highlights

DS5100

- Selectable focus system
- Display and multi-language messages
- ID-NET™ embedded interface for high speed communication network
- Genius™ (Windows™ based) SW
- Serial Host Mode Programming sequences

Technical data

- 800-1000 scans /sec
- 2 inputs + 2 outputs
- RS232 + RS485 serial port, Ethernet, Profinet
- Typical reading range of 200 1350 mm
- Subzero ver. up to -35°C (-31°F)
- Power supply:10-30 Vdc
- Protection class: IP65
- Ethernet Bus Connections (EBC) for high speed data transmission and real time synchronization (as slave with 8k)

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

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
- Genius™ (Windows™ based) SW

Technical data

DS6300/DS6400

- Optics: adj. (DS6300) Flash™ (Dynamic) (DS6400)
- Scan rate: Up to 1200scan/s
- Reading range: 250 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.

DS8110/DX8210

- · Airport Baggage Handling
- · Parcel Sorting
- · Retail Distribution Center
- · Loading/Unloading System Shop Floor and Manufacturing
- · Automatic Warehousing Management



Highlights

DS8110 linear barcode scanner/ DX8210 omnidirectional barcode scanner

- ALL-IN-ONE architecture (DX8210)
- Top class reading performance
- Excellent performance on Low quality code
- DST (Digital Signal Technology) offering stable and constant performance at any operative conditions
- Multi laser ASTRA G3 technology
- Ethernet Bus Connections
- Fully redundant configuration, no single point of failure
- Compact mechanical dimensions
- Unmatchable ease of use and ease of
- e-GENIUS web browser programming tools
- Modular architecture and building block configurations
- Ease maintenance and automatic replacement
- Genius™ (Windows™ based) SW

Technical data

DS8110

- Scan pattern type: linear
- Scan rate: 1000 scans/s
- Reading range: 500 to 1900mm
- Max. resolution: min 0.25mm/max 0.50 mm
- Dimensions: 216 x 96 x 127 mm [8.5 x 3.8] x 5 in]
- Protection class: IP65
- Operating temperature: 0°C to 50°C
- Factory warranty: 2 years

DX8210

- Scan pattern type: X-Pattern
- Scan rate: 1000scans/s
- Max. resolution: min 0.25mm/max 1.0 mm
- Dimensions: 381 x 328 x 92.5 mm [15 x 13 x 3.6 in1
- Protection class: IP65
- Operating temperature: 0°C to 50°C
- Factory warranty: 2 years

LASER BASED BAR CODE SCANNERS

APPLICATIONS

TC1200/DS1100

- · Access control systems
- ATL (Automated Tape Libraries)
- Self service systems (ATM, kiosks)
- 0EM integration in automatic machines
- Game automation (Lotto, Lottery, etc.)
- Chemical and blood analysis machines
- Print & apply systems
- Film processing machinesShipping & Receiving
- Cross docking



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

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/DS2200

- 0EM 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

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

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

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

0EM

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





Highlights

DS2100N/DS2400N

- · Embedded Ethernet connectivity
- Two Profinet Ports
- Embedded Ethernet Switch
- Rotating connector block
- Compact dimensions
- Installation flexibility and optimum form factor
- ACR4™: Advanced Code Reconstruction
- Excellent performance on low quality and damaged labels
- DS2100: Up to to a 300 mm (11.8 in.) reading distance
- DS2400: Up to a 600 mm (23.6 in) reading distance

Technical data

DS2100N

- Scan rate: up to 1000scans/s
- Reading range: 50 to 300mm
- 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 1000scans/s
- Reading range: 70 to 600mm
- Max. resolution: 0.12mm (5mils)
- Power supply: 10 to 30VDC, 4W 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)

IMAGE BASED BAR CODE READERS

APPLICATIONS

MATRIX 120™

Electronics

· Track and trace PCB board manufacturing

Manufacturing

- Print & Apply label verification
- Food & Beverage traceability

• Kiosks - ticketing machine

- analysis machine



MATRIX 210N™

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 220™

Electronics

- Tracking/tracing of electronic products and components
- DPM bar code reading

- DPM code validation after marking
- Work-in-progress control, parts and assembly traceability

Packaging

- Primary packaging bar code reading
- · Package traceability
- Food and beverage application

Document handling

· Fast decoding for high speed applications

MATRIX 300N™

Manufacturing

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

Document Processing

· High speed process control

Medical

Medical device traceability

Clinical Lab Automation

- Biomedical analysis machines
- Specimen collection machines

Logistics Automation

- · Carton and tote traceability
- Automated warehousing

Highlights

MATRIX 120™

- Ultra compact dimensions for easy integration
- · Smart user selectable focus for high application flexibility
- ESD Version for electronic applications
- Polarized Version for 90° mounting and reflecting surfaces
- . DL.Code sw configurator for outstanding ease of setup
- · Xpress, Green spot and intuitive HMI for top ease of use

Technical data

MATRIX 120™

- WVGA 1,2MP Models and Wide angle
- · Embedded Ethernet connectivity
- · Serial and USB on the same model
- · Top Industrial grade: IP65
- Operating temperature: 0-45°C
- Supply Voltage: 5 to 30 Vdc

Highlights

MATRIX 210N™

- Integrated Ethernet, PROFINET, EtherNet IP
- Electronic focus control option
- High performance DPM bar code reading
- . Outstanding decoding capability on DPM and labeled 1D & 2D standard codes
- · Straight and right angle models for smart mounting
- ID-NET™ reader clustering/networking
- Industrial Protection: ESD-safe, YAG, IP65
- DL.CODE™ configuration SW and X-PRESS™ for easy and intuitive setup

Technical data

MATRIX 210N™

- · Extremely compact dimensions: 50x25x45mm & 54x45x32mm
- · High speed integrated EtherNet for real time image transfer
- WVGA image resolution, 60 frames/s
- Object speed: up to 2.0m/s
- Connectivity: Ethernet 10/100: EtherNet IP, PROFINET, TCP/IP, UDP, FTP, MODBUS TCP Serial RS232/RS422/RS485 up to 115.2 Kbit/s + Aux RS232
- IP65, 0-50°C

Highlights

MATRIX 220™

- Compact dimension and superior performance in its class
- New red and blue-light All-In-One DPM illuminator for strong DPM reading performance
- Top performing High Power Illuminator models for challenging high speed applications
- Smart electronic focus control for high reading flexibility
 Total connectivity to main industrial Fieldbus
 Easy installation and setup thanks to
- DL.CODE software
- ESD and Anti-YAG protection as front cover accessory for extreme flexibility and optimized stock
- New flexible cables suitable for robotic arms applications

Technical data

MATRIX 220™

- New multicore image processing platform excellent for high speed applications
- Hardware Acceleration to speed up algorithms and improve decoding capabilities
- 1.2 MP high resolution image sensor
- Embedded Ethernet/IP and Profinet-IO industrial fieldbus
- Power over Ethernet (PoE) option available
- IP65 and IP67 industrial grade for harsh environments
- Operating temperatures: -10 °C to 50°C (14 °F – 122 °F)

Highlights

MATRIX 300N™

- Ultra-compact dimensions
- · High performance DPM reading
- Liquid Lens Dynamic Focus Control
- · Integrated dual illuminator: dark field/bright
- · Fast and high resolution image sensor
- · Power over Ethernet Option and onboard PROFINET-IO
- Extreme Industrial grade: IP65-IP67 Industrial grade for harsh environments, 0-50°C operating temperature
- DL.CODE™ configuration SW and X-PRESS™ for easy and intuitive setup

Technical data

MATRIX 300N™

- . Manual and electronic focus control
- · CMOS global shutter sensor
- 1280 x 1024 (1.3 megapixels) image resolution
- Read rate: 60frames/s
- Connectivity: Ethernet 10/100: EtherNet IP, TCP/IP, UDP, FTP, MODBUS TCP, Serial RS232/RS422/RS485 up to 115.2 Kbit/s + Aux RS232,
- On-board PROFINET-IO
- IP65-IP67, 0-50°C





IMAGE BASED BAR CODE READERS

Highlights

MATRIX 410N™

image (scaled)

up memory and display

with image archiving database

for easy and intuitive setup

• Patented continuous high power mode

• Patented Packtrack 2D for short object

Embedded Ethernet connectivity, with

Profinet, EtherNet IP, TCP/IP, FTP, HTTP

On board image storage saving up to 3,000

External connection box with parameter back

· Remote, web-based WebSentinel software

DL.CODE™ configuration SW and X-PRESS™

gapping in sortation applications

APPLICATIONS

MATRIX 410N™

Automotive

· Part traceability in assembly

Distribution & retail industry

- Manual Presentation
- · Small Objects Sorting
- Totes content scanning

Medical & pharmaceutical

- Automated storage/retrieval
- Automated Order fulfilment/ validation

Warehouse

• End of line, Carton/objects, single or multi-side scanning



Highlights

MATRIX 450N™

- · 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
- Patented Packtrack function for object gap tolerance up to 50 mm (2 in)
- 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
- DL.CODE™ configuration SW and X-PRESS™ for easy and intuitive setup

Technical data

MATRIX 410N™

- Operating temperature:
- Manual Focusing models: 0° to + 50 °C (32 to 122°F)
- Electronic Liquid Lens models: -20° to + 70 °C (-4 to 158°F)
- On board image storage saving up to 3,000 image (scaled)
- Protection class: IP65-IP67
- CMOS global shutter sensor
- 1.3 or 2.0 MP, 45-60 frames/s
- Connectivity: Ethernet 10/100: Ethernet IP, PROFINET, TCP/IP, UDP, FTP, MODBUS TCP Serial RS232/RS422/RS485 up to 115.2 Kbit/s
- + Aux RS232

MATRIX 450N™

Transportation and Logistics

- Automated sorting
- Manual postal sorting
- Loading / unloading

Distribution & Retail

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



Technical data

MATRIX 450N™

- 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%
- Factory warranty: 2 years

STS 400™

Transportation and Logistics

- Postal and courier express sorting
- · Solution for tires traceability and sorting
- Revenue recovery
- · Reverse logistic processes

Distribution & Retail

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



Highlights

STS 400™

- Easy to install: 100% pre-assemble calibrating
- Easy to mantain
- Simple and lean: simple and regulated render layout which avoids articulated mounting patterns
- Long-term reliability: no moving on board guarantee reliability and longer life-cycle
- · Ready for the future: compatible with changing requirements such as downsizing of code heights or introduction of cd codes

Technical data

STS 400™

- 5 to 8 clustered Matrix 410
 2 MPixels imagers sensor
 Interfacing CBX500 with display and back up memory
 • Persistent Image Saving on specific
- reading results (No Read) for diagnostics or reporting
 • IP65, 0-50° operating temperature
- Ethernet, Profinet and Ethernet IP embedded

XRF 410N™

- E-Commerce
- · General material handling with reusable totes
- Medium object sortation for couriers
- Postal Sorting



Highlights

XRF 410N™

- · Easy to select the correct model
- · Easy to install
- Increase customer productivity
- · Ease of use
- · Solves the most demanding sortation
- Easy to monitor and validate status
- · Patented Packtrack function for object gap tolerance up to 50 mm (2 in)

Technical data

XRF 410N™

- Full working solutions in one order number
- Factory calibration, optimized for code resolutions 0.25 mm, 0.33 mm, 0.38 mm
- Factory calibration, optimized for speeds up to 2.2 m/s
- · Ethernet connectivity on board
- Power supply: 24 VDC
- Protection class: IP67

IMAGE BASED BAR CODE READERS

APPLICATIONS

AV7000™

Transportation and Logistics

- · Postal and courier express sorting
- Revenue recovery
- Reverse logistic processes
- OCR and Videocoding
- · Extended ID and Image saving

Distribution & Retail

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



Highlights

AV7000™

- Single view high quality picture on large conveyor (1400 mm/55 inch)
- Excellent reading performances on high speed conveyors: 4.8m/s (945fpm)
- Patented Pulsed Lighting System to reduce reading station footprint 2.2m (7ft)
- Patented Autofocus System offering extended DoF
- Patented Digital Zoom technology assuring constant DPI resolution
- New generation decode algorithm to read very bad quality label
- Multiple format Image saving from full definition to highly compressed JPG
- Integration with dimensioning and scale system

Technical data

AV7000™

- CMOS linear sensor: 8192 pixels
- Image resolution: 110-260DPI (application dependent)
- Scan rate: 33KHz
- Readable symbologies: all standard 1D and 2D codes
- · High quality Image for OCR and Videocoding
- Connectivity: RS232/RS485, Ethernet
- Video output: Gigabit Ethernet, CC-Link
- Protection class: IP65
- Operating temperature: 0°C to 50°C
- Factory warranty: 2 years

DIMENSIONER

APPLICATIONS

DM3610 1-Head Solution

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



Highlights

DM3610 1-Head Solution

- NTEP, OIML and MC certified for Legal for Trade applications on belt conveyors
- NTEP and OIML certified for Legal for Trade applications on cross-belt
- Works for cuboidal
- Works for singulated and non-singulated package flows

Technical data

DM3610 1-Head Solution

- Only cuboidals
- Singulated (spacing >20mm)
- Accuracy of ±5mm at transport speeds up to 3.1 m/s
- Maximum box size 2500mm x 1200mm x 900mm
- Operating temperature: 0°C to 50°C
- IP 65
- Factory warranty: 2 years

DM3610 2-Head Solution

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



Highlights

DM3610 2-Head Solution

- NTEP and OIML certified for Legal for Trade applications on belt conveyor and cross-belt
- Works for cuboidal and irregular package flows
- Works for singulated and non-singulated package flows
- Reduced shadowing

Technical data

DM3610 2-Head Solution

- Cuboidals and Irregulars
- Singulated (spacing > 25mm)
- Accuracy of ±5mm at transport speeds up to 3.1 m/s
- Up to 3.1 m/s (620 fpm)
- Maximum LWH = 2500x1600x1000mm
- Operating temperature: 0°C to 50°C
- IP 65
- Factory warranty: 2 years

CONNECTIVITY DEVICES

WIDE RANGE OF **CONNECTIVITY**FOR THE IDENTIFICATION PRODUCT RANGE WITH STANDARD IP65 (NEMA4) PROTECTION CLASS AND OPERATING TEMPERATURE UP 0 TO 50°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



SC SERIES

- Protection class: IP65 (NEMA4)
- Operation temperature: 0 to 50°C
- Network or cluster controller
- Dedicated data-collector for maximum reading performance
- Scalable and modular connectivity
- Backup/restore module
- Maximum compatibilty and scalability
- Ethernet TCP/IP, EtherNet IP, Profibus, DeviceNet (QLM series)
- Factory warranty SC4000/SC5000: 2 years



QL SERIES

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





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Subzero models are not available for offer, sale or distribution in Germany.

www.datalogic.com