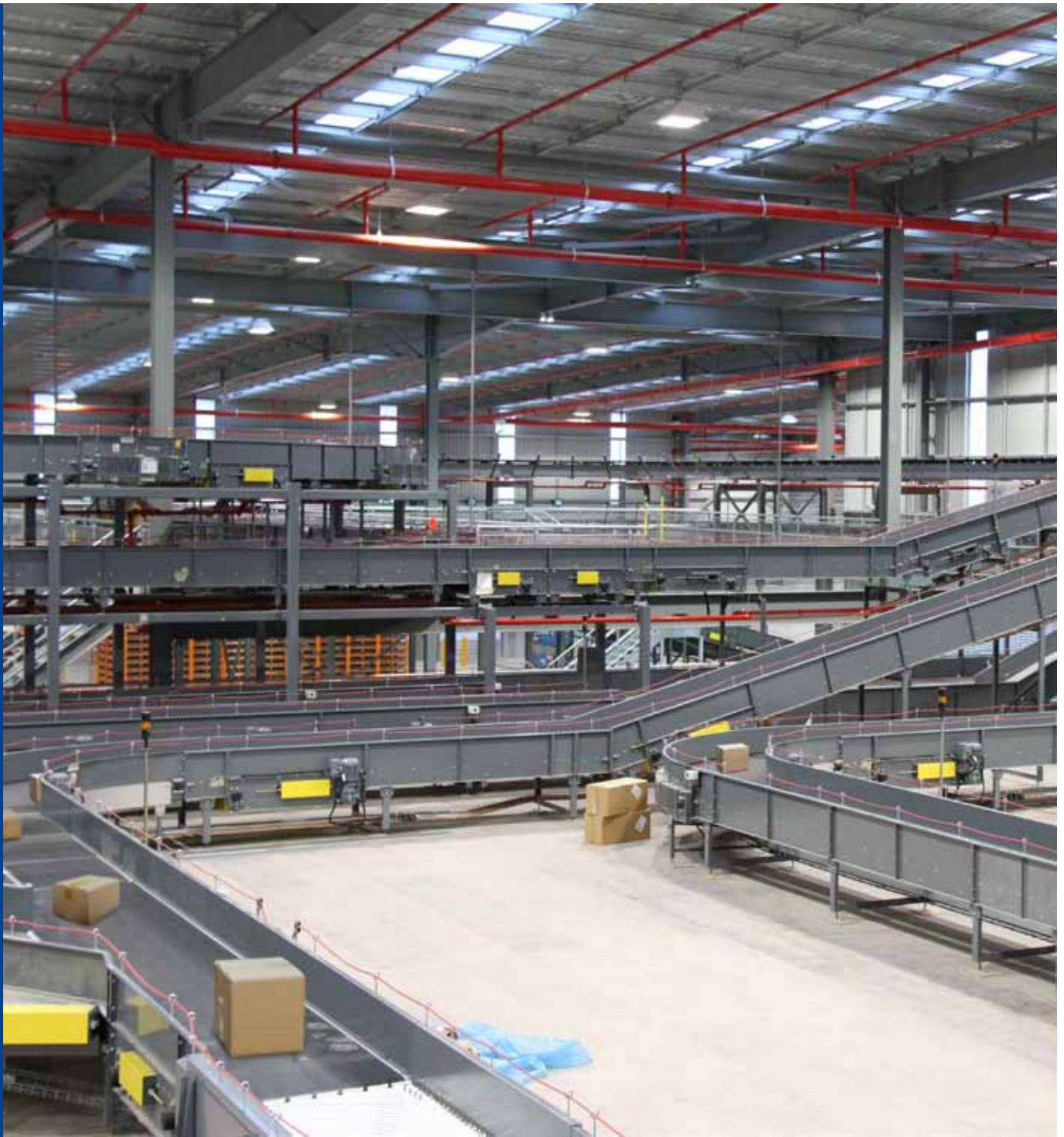# PRODUCT GUIDE

>Identification

◈DATALOGIC
THE VISION IS YOURS

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
- Packtrack function for object gap tolerance up to 50 mm (2 in)
- 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 ± 20%

NVS9000™
- CCD sensor: 8192 pixels
- Image resolution: 110-260DPI (application dependant)
- 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

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
- Liquid lens electronic focus control - Optional
- 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
- 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
- Embedded PROFINET-IO connectivity
- 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.

DS2200

TC1200

DS6300
DS6400

DS1500

DS1100

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)
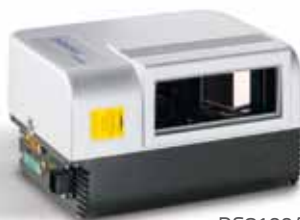- Operating temperature: 0°C to 50°C

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

AXIOM-X

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 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
- 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

DIMENSIONER

APPLICATIONS

DM3610
- Parcel revenue recovery
- Distribution Center spatial management
- Trailer load planning
- Automated shipping and manifesting systems

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 ±5mm at transport speeds up to 3.1 m/s
- Maximum box size 2450mm x 1200mm x 900mm for a single head
- Operating temperature: 0°C to 50°C
- IP 65

DM3610

CONNECTIVITY DEVICES

Wide range of connectivityfor 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

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°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)

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 x 136 x 65mm (Basic), 134 x 191 x 67mm (Enhanced)
- Supply Voltage 12-30 VDC, 25 W Max

SC SERIES

QL SERIES

CBX SERIES

AL5010 INTERFACES MODULE

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Rev. 10, 09/2014

9C0002870

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