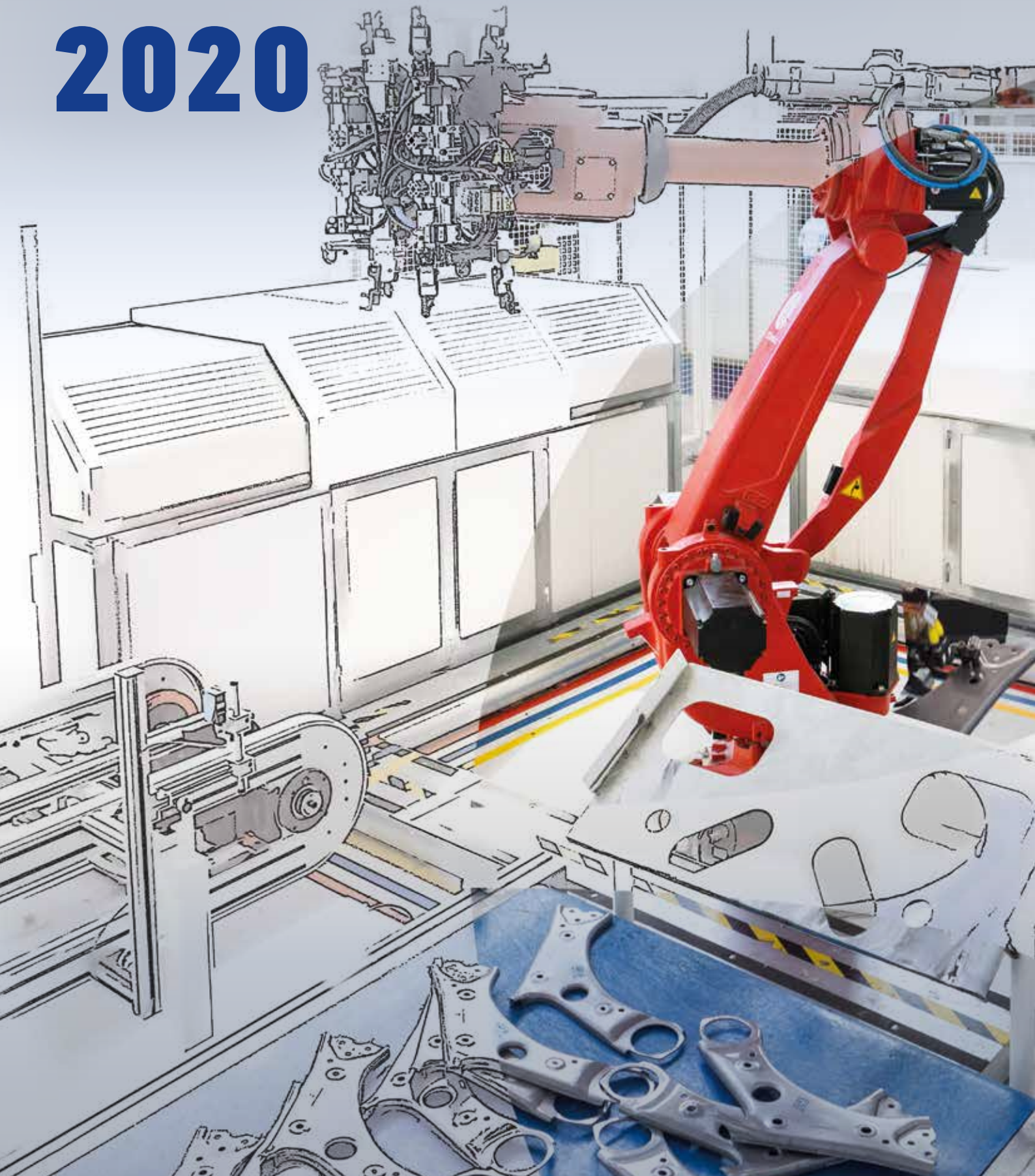# NEW PRODUCTS 2020

DATALOGIC

EMPOWER YOUR VISION
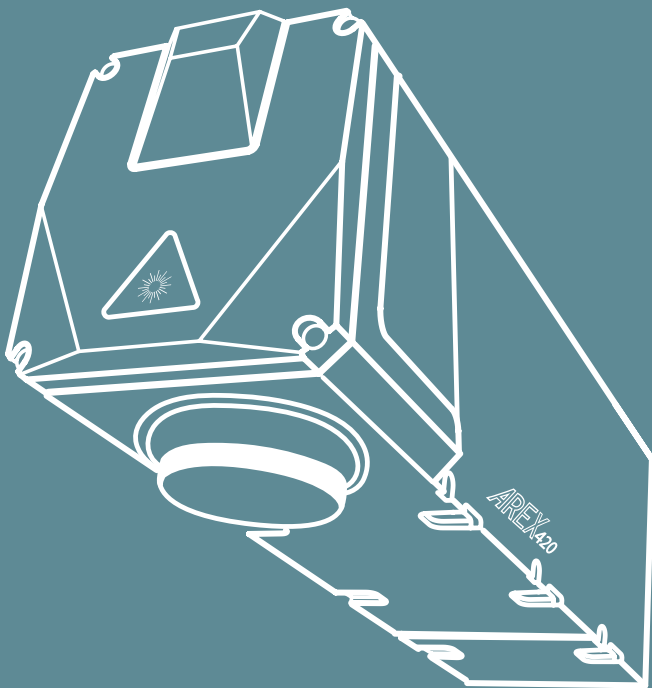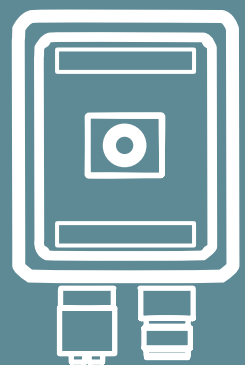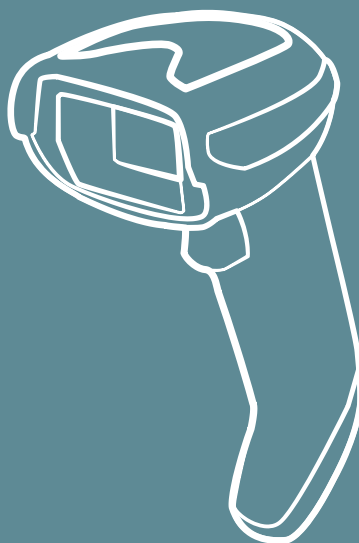
TRACEABILITY SOLUTIONS

Traceability solutions

MATRIX 120™

The Matrix 120 imager is the smallest ultra-compact industrial 2D imager range in the market to fit any integration space and with embedded Ethernet connectivity.

With only a few models, Matrix 120, covers all of the targeted application in the OEM and Entry Level Manufacturing industries.

The Matrix 120 with the red light model is the first stationary industrial scanner in the market able to read Digimarc Barcode for added value decoding applications.

The Matrix 120 features the top industrial grade parts in its class, with ESD safe models for applications in the electronic industry and a glass-free reading window, suitable for the Food and Beverage environment.

As part of the full Matrix series, the Matrix 120 leads the market for customer ease of use because of DL.CODE™ configuration software, X-Press™ button and intuitive HMI.

Features & benefits

- Ultra compact dimensions for easy integration
- WVGA – 1.2 MP and wide angle models
- Smart user selectable focus for high application flexibility
- Digimarc Barcode reading technology for added value decoding applications
- Embedded Ethernet connectivity
- Serial and USB options on the same model
- ESD versions for electronic applications
- Polarized Version for 90° mounting and reflecting surfaces
- Top industrial grade: IP65; operating temperatures: 0-45 ºC / 32 – 133 ºF
- DL.Code software configurator for outstanding ease of setup
- Xpress, Datalogic's 'Green Spot' technology and intuitive HMI for top ease of use

Applications

- Electronics: track and trace PCB board manufacturing
- Print and Apply: label verification
- Food and Beverage: traceability
- OEM: kiosks - ticketing machine
- Healthcare: chemical and biomedical analysis machines - vials identification

MATRIX 220™

Matrix 220 is the most compact image-based bar code reader available to provide top performance with the greatest flexibility. This imager is the ideal solution for Electronics, Automotive, Packaging and Document Handling applications. The Matrix 220 imager is designed for superior performance because of a new multi-core imager processing platform, a new industrial grade electronic focus technology and innovative lighting solutions. The integrated ultra-flexible illumination system makes the Matrix 220 imager perfect for reading bar codes marked with Direct Part Marking (DPM).

The Matrix 220 guarantees the best quality and robustness along with cost-effective communication options, fulfilling any scanning requirement in a single device.

Features & benefits

- Industrial grade electronic focus on all models for extreme reading flexibility
- New All-In-One DPM illuminator. Red and blue-light polarizing filter and diffused illuminator on one model for many applications needs and strong DPM reading performances
- Top performing High Power Illuminators models for challenging high speed applications
- New multicore image processing platform, excellent for high speed applications and capable of reading up to 2 mils code resolution
- Digimarc Barcode reading technology for added value decoding applications
- High Dynamic Range to improve image quality and contrast
- Power over Ethernet option, onboard PROFINET IO and ETHERNET/IP for industrial connectivity
- OPC UA protocol for Industry 4.0
- ESD and Anti-YAG protection as front cover accessory for extreme flexibility and optimized stock

Applications

- Electronics: track and trace PCB board manufacturing, electronic components (e.g. chip), electronic products tracking, DPM barcode reading (on plastic, glass, metal)
- Automotive: DPM code validation after marking, work-in-progress control, parts and assemblies traceability
- Packaging: primary packaging barcode reading, package traceability, food & beverage
- Document Handling: high speed applications

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MATRIX 300N™ 2MP

The Matrix 300N 2MP image-based reader enriches the Matrix 300N product family and the Datalogic product portfolio thanks to its outstanding performance and the smallest form factor in the industry.

With a 2 Megapixel resolution sensor, the liquid lens and with the new 10 LEDs high power illuminator the Matrix 300N 2MP makes the Matrix 300N product family the ideal solution for Automotive, Electronics, Intralogistics and Packaging applications.

With its outstandingly compact dimensions and rotating connectors, the Matrix 300N 2MP can be easily integrated into the tightest spaces and offers cost-effective communication options, providing onboard PROFINET IO and Ethernet/IP and eliminating external communication boxes or converters.

Features & benefits

- 2 Megapixel sensor
- High power illuminators for long range reading distances
- Liquid lens for electronic adjustable focus on 9mm and 16mm focal length
- Capability to read 1.5 mils DataMatrix
- Multi LED-Chains Illuminators with diffuser for DPM applications
- High-power polarized illuminator for reflecting surfaces
- Continuous High-Power Mode (CHPM) to eliminate the flickering effect and protect the user's view
- Compact dimensions and rotating connectors for easy integration and installation in tight spaces
- Laser aiming system on all models
- Onboard Ethernet/IP and Profinet IO for industrial connectivity
- IP65 and IP67 industrial grade for harsh environments
- Operating temperatures: 0 to 45 ºC/32 to 113 ºF
- Easy of use and setup thanks to DL.CODE™ configuration software

Applications

- Automotive: parts and assemblies traceability, DPM code quality validation after marking, tires assembly tracking, wip traceability and control
- Electronics: parts traceability and control, high resolution codes reading, WIP control and tracking, DPM code quality verification and trending after marking
- Intralogistics: carton reading, reusable totes traceability, automated warehouse, automatic picking process control
- Packaging: label print & check, secondary packaging traceability, end of line palletizing

AV500

AV500 is an innovative 2D image-based industrial reader setting a new paradigm for logistic applications with high speed transportation systems on all conveyor sizes, airport baggage handling systems, as well as static reading applications.

With an industry-leading high resolution 5 MP sensor, image acquisition at 32 frames per second, dynamic or adjustable focus, and multiple lens options, the AV500 reader creates a new optical standard for unattended data capture solutions.

Continuous frame acquisition, no-flashing white or red integrated illumination, and colored spot indicators make the AV500 reader the unprecedented solution for operator attended applications as manual object presentation in overhead scanning mode or manual conveyor loading.

PackTrack™ capability allows the AV500 reader to minimize the gap between objects and increase the system productivity. FPGA hardware accelerates real-time image elaboration. Captured images are stored on-board and optionally transferred to external supports through the integrated Gigabit Ethernet connectivity.

Features & benefits

- Variable DYNAMIC focus system with 3 different modes
- 5 MP CMOS sensor
- Up to 32 frames per second acquisition rate
- Powerful Intel Pentium QUAD core processor
- High speed image transfer and onboard image processing

Applications

- Automated and manual sorting
- Dimension Weight Scan System
- Order fulfillment and verification
- Shipping and Receiving systems
- Baggage handling systems at airports

GRYPHON™ CORDED AND WIRELESS

WIRELESS CHARGING
CONTACTLESS, QUICK, CAREFREE

The Gryphon™ I 4500 2D series represents the premium range of hand held imagers from Datalogic for general purpose applications. The GD4500 scanner is the desk (corded) version, available in the standard and with an All-in-One Permanent Base form factor. The 4500 Series introduces for the first time in the hand held sector an innovative and contactless 'wireless charging system' for the wireless models. The GBT4500 model is the wireless version with Bluetooth® technology and the GM4500 model is the wireless version featuring Datalogic's STAR Cordless System™ narrow band radio.

The Gryphon 4500 series stands out with an elegant and trendy design, user friendly ergonomics and features the most advanced megapixel sensor with warm-white-illumination 2D technology for outstanding performance.

The Gryphon 4500 omnidirectional imager provides snappy reading performance on all common 1D and 2D codes. High Density (HD) models are available for reading smaller, condensed codes as well as Dot codes. A dedicated version with red illumination optics supports also Digital Watermarking.

The Gryphon 4500 imagers are also available in Healthcare models featuring disinfectant-ready and anti-microbial enclosures for applications in the Healthcare industry.

Features & benefits

- Megapixel performance and distinctive white-illumination technology for superior scanning and depth of field
- Image capture and document scanning capabilities
- Ultimate design and user-friendly ergonomics
- Wireless battery charging system - no contacts means no need for contact cleaning or maintenance procedures
- Choice of Bluetooth wireless technology v4.0 with BLE or Datalogic's STAR Cordless System (radio frequencies available in 433 MHz or 910 MHz)
- Adjustable position cradle with scan-while-charging capability allows desk, wall and presentation options
- Powerful long lasting Lithium-Ion battery allows up to 80,000 reads per charge and up to more than 80 hours of continuous operating time
- Dedicated models for Healthcare have been specifically developed with Disinfectant-Ready enclosures treated with anti-microbial additives

Applications

- Retail: point of sale checkout (food and non-food)
- Light manufacturing: quality verification
- Hospital: bedside care, admittance, clinical lab
- Pharmacy: drug verification, payment
- Commercial services: postal, bank, public administration, utilities, access control, transportation and entertainment

POWERSCAN™ 9501 AUTO RANGE

The PowerScan 9501 Auto Range model is a hand held industrial scanner with area imaging technology that can read 1D/2D bar codes with an extended reading range. Its' powerful autofocus system allows the scanner to read from a short distance of 10 cm to a distance of more than 15 m depending on code resolution with a fast focus adjustment, allowing the operator to move from scanning a close-up code up to reading the top of a warehouse rack.

A powerful LED lighting system projects a regular pattern with sharp edges and can be used as a field of view indicator for close up codes. The laser aiming technology enables the visibility of the scanner aimer even at long distances.

The PowerScan 9501 AR is optimized for dark environments where illumination conditions are very poor.

The 9501 Auto Range series covers a wide range of code resolutions, being able to reach 3 mils for linear codes and 4 mils for 2D codes.

The 9501 AR series shares the rugged, ergonomic housing of all PowerScan scanners that are built to offer durability in tough environments.

Features & benefits

- Dimensions: 21.2 x 11.0 x 7.4 cm / 8.3 x 4.3 x 2.9 in
- Weight: 390.0 g / 13.8 oz
- Interfaces: RS-232/USB/Keyboard Wedge Multi-Interface
- Particulate and water sealing: IP65
- Temperature operating: -20 to 50 °C / -4 to 122 °F
- Electrical current: Operating (Max Reading) 500 mA
- Input voltage: 4.5 – 30 VDC
- Resolution (maximum): 1D Codes: 3 mil; 2D Codes: 4 mil
- New Datalogic proprietary scan engine with extra-long range capabilities

- Fast autofocus system
- Optimized for dark environments
- Ability to scan from LCD screens
- Decodes up to 3 mils
- Datalogic's STAR Cordless System 2.0 proprietary narrow band radio
- 3-second battery replacement
- Datalogic's 3GL™ Technology (3 Green Lights) Good-Read Feedback

Applications

- Picking
- Forklift applications
- VMT Integration
- Warehouse management

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FBC9080 FIELDBUS CONVERTER

The new Fieldbus Converter is a compact-size industrial gateway to integrate all Datalogic PowerScan™ readers and cradles into industrial control systems. Additionally, the FBC9080 Fieldbus Converter allows the connection of any devices equipped with a standard RS-232 communication interface into Profinet IO and Ethernet IP networks.

With the FBC9080, Datalogic's hand held scanners add industrial fieldbus connectivity to be connected to the most common PLC.
The FBC9080-N100 Gateway provides an easy way to connect Datalogic scanners and cradles to any PLC with PROFINET IO support.
Similarly, the FBC9080-N200 Gateway provides an easy way to connect many Datalogic devices to any PLC with EtherNet/IP IO support.

The Fieldbus Converter FBC9080 includes different installation options and is equipped with a dual port switch. The industrial M12 connectors and the IP65 protection are perfect to use in demanding industrial Ethernet applications.
The Fieldbus Converter FBC9080 can be used with all PowerScan PD9XXX devices as well as with Base Chargers BC9X30. The reading device and the FBC9080-Nx00 are easily configurable with Datalogic's Aladdin™ software tool. A USB connector and a rotary switch located under the cover cap are accessible for this purpose.

Features & benefits

- Serial to PROFINET, EtherNet/IP, Ethernet TCP/IP industrial gateway
- Industrial M12 connectors
- IP65 rated industrial design
- Integrated dual port switch
- Visible Power, Communication and I/O indicators
- Flexible mounting
- Datalogic's Aladdin™ software for device configuration

Applications

- Manufacturing Automotive and Electronics, Food, Packaging and Logistics
- Warehouse / Logistic Centers

DSM04XX FIXED SCAN MODULE

DSM04XX Fixed Scan Module is the solution for high performance fixed position scanning in a compact form factor.

Available in WVGA and Megapixel models with different Field of View and Depth of Field.
The wide-angle model is particularly useful for embedded applications where space is at a premium. The enclosure is constructed with high impact resin that is resistant to cleanings solvents and disinfectant solutions. IP54 particulate and water sealing allows rugged and dependable scanning performance.

The DSM04XX Fixed Scan Module provides simple electrical and mechanical integration for system designers. Included mounting hardware allows mounting from all sides of the device at any angle. Interface options include USB, RS-232 or multi-interface models allowing 'plug-and-play' installation perfect for integrators who must support multiple platforms and applications.

Features & benefits

- More than 60% smaller than the GFS4400 – Perfect for tight spaces
- WVGA, Megapixel and Megapixel Wide Angle camera options
- Excellent Low Light and Motion Tolerance - Consistently fast reading performance
- Rugged enclosure with IP54 dust and water sealing - Suitable for industrial and manufacturing environments.
- Interface options of USB, RS-232 or both - Simple integration in mulitple applications

Applications

- Access Control
- Service Kiosks
- Lab Test Equipment

Traceability solutions

AREX400

AREX400 is the new generation of Fiber laser markers dedicated to the manufacturing industry for branding and traceability applications.

The AREX400 family is the preferred solution for any application requiring reliable Direct Part Marking (DPM) in manufacturing industries, from automotive to precision mechanics and from industrial electronics to healthcare manufacturing.

Features & benefits

- Scanhead dimensions:
  89 x 96 x 311 mm, 3 Kg
- Controller dimensions:
  427 x 111 x 435 mm
- Interfaces: RS-232, 6xUSB, 3xEthernet, Digital IO
- Available in 5 power sizes: 10W, 20W, 20W MOPA, 30W, 50W
- Supports MARVIS – MARK & VALIDATE Solution
- Controller weight: 16 kg
- Laser Green Spot

SCANHEAD
- Ultra-compact and lightweight; Laser Marking Green Spot
- Robust, design for durability even in harsh environments
- IP64 protection against dust, lubri-coolant and oil droplets
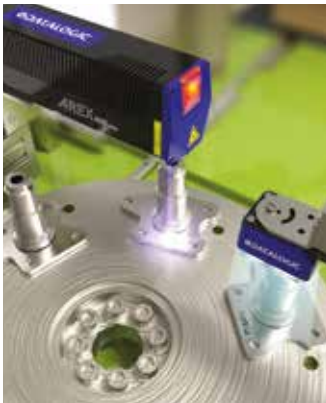- High resistance conduit suitable for robotic applications

CONTROLLER
- All-inclusive design, no external PC or hardware required
- Safe Laser Off function: Integrated twin relay contactors to shut down laser power for ISO13849-1 compliant applications

Applications

- Traceability: Direct Part Marking of products' identification codes: Serial Numbers, Lot and Batch numbers, 1D and 2D bar codes and human readable codes
- Personalization and branding: Direct Part Marking of company brands, logos, artwork, ideogram, quality marks, etc.

MARVIS

MA.R.V.I.S. (MArk Read Verify Integrated Solution) is the new Datalogic solution that ensure quality of laser marked 2D codes.

The readability of a code along the entire production line and supply chain is an essential requirement in automotive and manufacturing industry.

Laser marking is a highly reliable process because of the direct interaction with the material, the readability of a code may be impacted by a number of technical and environmental factors, including substrate scratches and defects, surface contaminants, like oil, grease, oxides, dust, machining residuals, line structure or parts vibrations, variation the production environment like ambient light, dust, oil and other external influences.

MARVIS is a complete solution than combine the flexibility of Datalogic Laser Markers Products with the reliability of Datalogic MATRIX N auto-id readers, with an unified intuitive software interface.
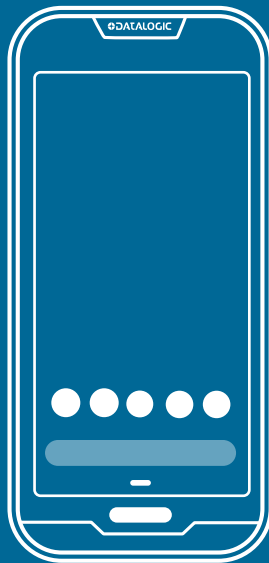
Features & benefits

- Unified, full graphical interface for Laser Marking and Code Reading
- Object-related Laser Properties and ID configuration
- Simplified reader connection and setup
- Auto setup and auto tuning features
- Multi codes verification
- Code Image storage
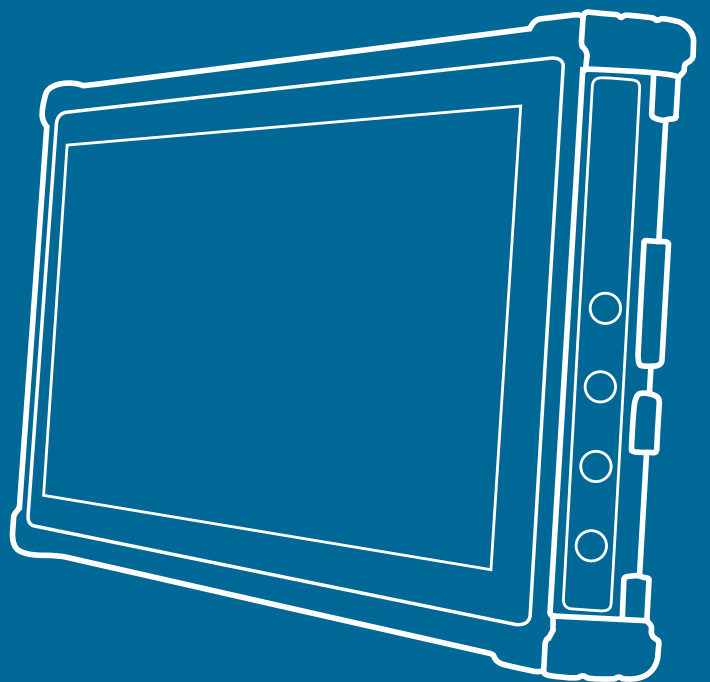- Advanced statistics informations

Applications

- Direct Part Marking and code Validation in Automotive and Industrial Electronics industries

DATALOGIC

NOTES

MOBILITY SOLUTIONS

Mobility solutions

MEMOR™ 10

WIRELESS CHARGING
CONTACTLESS, QUICK, CAREFREE

The Memor 10 incorporates the latest smartphone technologies and the user friendly experience of Android™ in a slim and compact design, combined with high performance 1D/2D bar code scanning and industrial robustness for almost any indoor or outdoor environment. The Memor 10 is powered by a superior octa-core platform clocked at 2 GHz for top performance with the most demanding applications, and features Android 8.1 (Oreo) with Google Mobile Services (GMS).

Moreover, the Memor 10 is one of the first rugged mobile computers to be validated by Google for the 'Android Enterprise Recommended' program for rugged devices.

The Memor 10 incorporates Datalogic's industry-first wireless charging system for ultra-reliable contactless charging, thus eliminating the need for cleaning contacts on the device and docks. Additionally, Memor 10 offers a 1-piece swappable battery for the best operational advantage.

Features & benefits

- Display: 5 inch IPS HD resolution 720 x 1280; LED backlight; Touch Screen: 5 points multi-touch capacitive panel with Dragontrail hardened glass
- Microprocessor: 2 GHz Octa-core
- Memory: System RAM: 3 GB; eMMC Flash: 32 GB
- WLAN: IEEE 802.11 a/b/g/n/ac and 802.11 k/r/v;
- WPAN: Bluetooth wireless technology v4.2
- WWAN: Full suite of cellular connectivity for voice and data, featuring LTE-Advanced/4G+

- New MegaPixel Scan Engine with improved Depth of Field reading DotCode and Digimarc reading capability
- Android 8.1 (Oreo) with GMS and AER
- Wireless charging eliminates all contacts on the device and cradle
- Assisted GPS for location based apps
- NFC for proximity communications
- Ruggedized with drop resistance to 1.5 m / 5 ft to concrete and IP65 sealing

Applications

- Retail: sales, inventory, access control
- T&L: route accounting, deliveries, management
- Manufacturing: production/quality control, inventory
- Healthcare: pharmacy, bedside care, inventory, labs

MEMOR™ 20

WIRELESS CHARGING
CONTACTLESS, QUICK, CAREFREE

Memor 20 is the best-in-class PDA born to face the toughest Enterprise challenges. Memor 20 incorporates the latest smartphone technologies, combined with high performance 1D/2D barcode scanning and industrial robustness.

The Memor 20 is powered by the superior Qualcomm SD660 Octa-core platform for top performance in the most demanding applications. It features the user friendly experience of Android™ 9 (Pie) with Google Mobile Services (GMS) and it's been validated for the 'Android Enterprise Recommended' program for rugged devices.

Security and customization are also distinctive features available with its Smart Docks that offer a unique locking function that secures the device to avoid unauthorized use, loss or theft. The Wireless charging technology gives to Memor 20 unparalleled reliability and best ergonomics for both indoor and outdoor applications.

Features & benefits

- Stunning 5.7" Full HD display in 18:9 ratio with Gorilla™ hardened glass
- Novel 2nd display for enriched notifications
- Microprocessor: Qualcomm SD660 2,2Ghz
- Memory: System RAM: 4GB; eMMC Flash: 64GB
- Front and rear color cameras
- WLAN: IEEE 802.11 a/b/g/n/ac and 802.11 k/r/v for fast roaming
- WPAN: Bluetooth v5.0
- WWAN: Advanced cellular connectivity for voice and data, featuring LTE-Advanced/4G+ and Dual SIM

- Assisted GPS for location based apps
- NFC for proximity communications
- Android 9 (Pie) with GMS and AER;
- Wireless charging eliminates all conctacts on the device and cradle
- SmartDocks with locking feature and USB/Ethernet wired communication
- Fingerprint sensor for secure user authentication
- Ruggedized with drop resistance to 1.8 m / 6 ft to concrete and IP65/67 sealing

Applications

- Retail: assisted sales, inventory, shop floor applications, mobile pos
- T&L: route accounting, direct store delivery, workforce management, courier value-added services
- Manufacturing: production and quality control, remote maintenance and tech support, Intra-logistics, Inventory
- Healthcare: Bedside care, Home/remote care, Pharmacy/labs, Inventory management

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DATALOGIC SHIELD

Subscription for predictable, recurring Android software updates*:

- Includes quarterly security patches based on the Android Security Bulletins: https://source.android.com/security/bulletin
- Includes firmware fixes and enhancements
- Android major version (dessert) upgrades included
- Support for 2 years after device's end of sale
- 12 month transition support for prior Android versions
- Automatic customer notifications of new updates

* Subject to Datalogic Shield or Ease of Care Terms & Conditions

DATALOGIC SHIELD

FALCON™ X4

The Falcon™ X4 mobile computer features a high performance multicore 1 GHz architecture that offers blazing speed when running Windows Embedded Compact OS and allows easy upgradeability to the Android™ OS.

Capture bar codes using Datalogic 1D and 2D imaging technologies. Communicate over a superior TI 802.11 a/b/g/n radio with CCX v4 compliance and MIMO technology for improved connectivity and coverage, or through wired standards including USB Hi-Speed, RS-232, Modem and Ethernet. Bluetooth® wireless

technology v4 provides support for the new low energy mode (BLE) and for improved voice recognition via wide band audio.

With the best ergonomics in this market segment, the Falcon X4 mobile computer reduces operator fatigue with no compromise in terms of reliability and robustness, resisting harsh environments, repeated drops, strong shocks and repetitive tumbles.

Features & benefits

- WLAN: TI Wi-Link 8, IEEE 802.11a/b/g/n; Frequency Range: Country dependent, typically 2.4 and 5 GHz; Cisco CCX v4 compliant
- WPAN: Bluetooth wireless technology v4 with BLE (Android models); Bluetooth v2.1 + EDR (WEC7 models)
- Audio: Integrated microphone, high-volume speaker
- Two models available: Hand Held and Pistol Grip
- Display: Reflective TFT daylight readable color display, 240 x 320 pixels, 8.9 cm / 3.5 in diagonal, 65K colors, backlight, touchscreen
- Keyboard: Polycarbonate hard cap keyboards with backlight; 29-key numeric, 29-key functional numeric or 52-key alphanumeric with discrete navigation
- Choice of Microsoft Windows Embedded Compact 7 or Android v4.4

- New **Auto Range** scanning capability up to 17 m / 55 ft providing superior performance for extended range applications
- TI 802.11 a/b/g/n radio with CCX v4 compliance and featuring MIMO antenna technology
- 1 GB RAM / 8 GB Flash memory
- Bluetooth wireless technology v4.0 with BLE (low energy) and Wide Band Audio for improved speech recognition (Android models only)
- Corning® Gorilla® Glass 3 scan window
- Full-shift hot swappable battery
- 3.5 inch touchscreen display
- Ruggedized with 1.8 m / 6.0 ft drop to concrete and IP65 sealing rating
- Choice of 1D or 2D imagers featuring Datalogic's patented 'Green Spot' technology

Applications

- Warehouse and distribution centers: retail, wholesale, manufacturing, automotive/ industrial, electronics, food/beverage, consumer products, pharmaceutical, third party logistics (3PL)

TASKBOOK™

Available in two form factors of 7 inch and 10 inch with a sealed design tested to IP65 and resistant at 1.2 m / 4 ft drop, the TaskBook represents the perfect rugged tablet for indoor warehouses operations.

Attaching its handgrip with an integrated XLR 2D imager and hot swappable battery, the TaskBook allows single handed scanning operations in the most efficient and comfortable way. A great mechanical design ensures a great balancing on the arm while guaranteeing easy and quick operations during scanning and battery swap.

The TaskBook can also be quickly converted in a vehicle mounted solution perfect for small forklifts or for those without a battery. Its docking station, available with both DC and AC power supply, allows to dock the device on a forklift in few seconds with a single hand operation while offering a seamless integration with the forklift itself.

Features & benefits

- Wi-Fi: 802.11 a/b/g/n/ac/r (2.4 GHz and 5 GHz)
- Handgrip: Mobile handgrip with optional hot swappable battery and Standard or XLR 2D imager; Standard range up to 1.1 m / 43 inches; Extra-long range up to 15 m / 50 ft
- Operating System: Windows 10 IoT
- Processor: Intel Atom E3826 Dual Core 1.46 GHz;
- Memory: RAM: 4 GB
- Storage: 32 GB CFast SSD (optional 64/128 GB)
- Dock Station with AC or DC power supply, 2 x USB, 1 x Ethernet, 1 x RS-232

- Sealed to IP65 protection class
- 1.2 m / 4 ft drop resistant without any need for additional accessory
- Anti-reflective Gorilla® Glass
- Handgrip with Standard or Extra Long Range imager
- Hot swappable battery for 24/7 operations
- Wi-Fi: 802.11 a/b/g/n, CCX v4 with diversity antennas
- Bluetooth® v4.0 Wireless Technology
- Dock Station with AC or DC Power Supply

Applications

- Warehousing and Distribution: Inventory, Picking, Shipping/ Receiving, Put away, Cross docking
- Transportation & Logistics: Harsh outdoor environments
- Manufacturing Shop Floor: Process control, quality control
- Public Safety: In-vehicle applications (with dock station)

Mobility solutions

RHINO II™

The Rhino II™ vehicle mount computers set the standard for ruggedness in the warehouse. A sealed design tested to IP65/IP67 ensures operation in the toughest environments. A dedicated freezer-rated version allows use in and out of cold storage.

Tailored for warehouse management, the Rhino vehicle computer increases productivity through reduced errors during receiving, put-away, picking and shipping activities. Adding a hand held bar code scanner such as Datalogic's PowerScan™ allows for quick data entry and location confirmations.

The Rhino vehicle computer is equipped with an internal isolated power supply, ignition sense to automatically control the power, and an optional battery backup for the ultimate protection against data loss. Mounting options include various brackets for the vehicle computer along with external keyboards.

Android NOW available!

Features & benefits

- Wi-Fi: 802.11a/b/g/n (2.4 GHz & 5 GHz)
- Bluetooth Wireless Technology 4.0
- 3 x USB 2.0; 1 x USB 3.0; Serial: 2 x RS-232 (bottom); 1 x Ethernet GbE
- Operating System: WEC7, Window 7 Emb, Windows 10 IoT or Android
- Processor: Freescale NXP ARM Quad Core: 1 GHz (WEC7 Standard models/Android 7.1); 800 MHz (WEC7 Freezer models); Intel Atom E3826 Dual Core 1.46 GHz (Win7/10)
- Choice of Microsoft and Android™ Operating Systems
- 10 inch or 12 inch high resolution color display
- Anti-glare multi-touch screen, with gloves support
- Wi-Fi: 802.11 a/b/g/n, CCX v4 with diversity antennas
- Bluetooth® v4.0 Wireless Technology
- Wired Ethernet (GbE)

Applications

- Warehousing and Distribution: Inventory, Picking, Shipping/ Receiving
- Transportation & Logistics: Cold storage and harsh outdoor environments
- Manufacturing Shop Floor: Process control, quality control

FORKLIFT SOLUTIONS

The forklift solution "PowerScan 9XXX + SD9030 dongle + Rhino II/Taskbook" represents the answer for a high efficient all-in-one warehouse solution. Capture, Transfer and Elaborate operations are perfectly and seamlessly integrated in this solution.

When paired with a PM9XXX reader, the SD9030 dongle acts as a base station by providing USB communication to the host represented by Rhino II or Taskbook vehicle mount computer. This allows bi-directional communication between the dongle and the cordless PowerScan reader implementing all the features of the Datalogic's proprietary STAR 2.0 radio systems: radio coverage up to 100 m with up to 16 different scanners paired at the same antenna.

In this new compact solution it is no longer needed to have the PowerScan Base Station on the forklift with considerable saving in space and efficiency inside the cockpit.

Features & benefits

Rhino II
- 4 Operating Systems
- 2 form factors: 10 inch and 12 inch
- Capacitive Multi touch or Resistive touch panels
- Choice of processor, RAM and storage memory

Taskbook
- 7 inch WSVGA or 10 inch WXGA screens
- High performance 1.6mm Gorilla Glass
- Repeated drops to 1.2 m / 4.0 ft onto concrete
- Water and Sealing Rating: IP65

PowerScan
- Extra-long range scanning capabilities on 1D/2D barcodes
- Best-in-class in dark environments
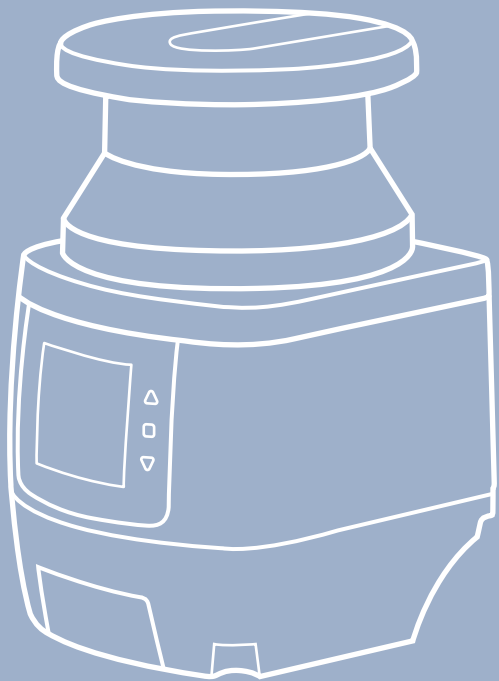- Optional Display with 4 or 16-Key alphanumeric keypad

SD9030 Dongle
- Datalogic's STAR Cordless System 2.0 Proprietary Narrow Band Radio
- Up to 16 devices supported by a single dongle and up to 100 m radio range
- Integrated solution '3 in a row' for logistic and intralogistic applications
- Top industrial grade, full solution IP65 certified
- Datalogic's STAR cordless system 2.0 proprietary narrow band radio
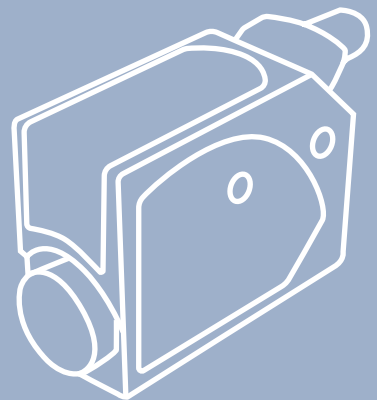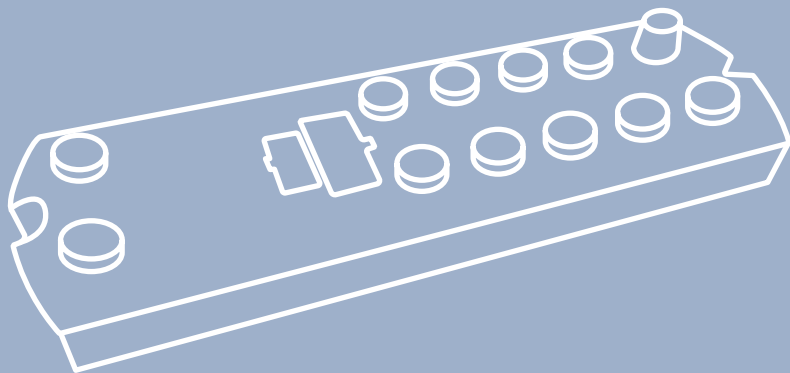- PowerScan holder specifically designed for Rhino II or Taskbook

Applications

- Warehousing and Distribution: Inventory, Picking, Shipping/ Receiving, Put away, Cross docking
- Transportation & Logistics: Including cold storage and harsh outdoor environments
- Manufacturing Shop Floor: Process control, quality control
- Public Safety: In-vehicle applications

◇ DATALOGIC

NOTES

DETECTION AND SAFETY SOLUTIONS

Detection and safety solutions

S5N IO-LINK

The Datalogic product range renewal is starting with Datalogic's best seller M18 tubular Sensor Line, made of the S5, S15 and S51 series, which will all be integrated into the new S5N line.
The S5N sensors with standard M18 flat tubular housing, will continue to offer the widest range in its segment, with a complete choice of optical functions, axial or radial optics, cable or M12 connectors, npn or pnp with no-nc outputs, etc.
The evolution from S51 to S5N will be accomplished by the new Datalogic ASIC which will improve and enhance the performance enabling the sensor portfolio with IO-Link V1.1 connection and smart sensor profile features.
The new S5N sensors will set the technical benchmark for the IO-Link connected sensor, becoming a reference point for the Industry 4.0 connected world. An IO-Link master will be available to enable the S5N and all future Datalogic smart sensor families to be connected from the machine to the cloud.

Features & benefits

- Retroreflective (on R2 reflector) 0,1...4 m
- Polarized retroreflective 0,1...4 m
- Retroreflective for transparent
  (on R2 reflector) 0,1...1,3 m
- Diffuse proximity up to 700 mm
- Background suppression 50...100 mm
- Contrast sensor 10 ± 2 mm
- Improved EMI immunity
- Improved ambient light immunity
- M18 flat plastic with universal mounting
- Available in M18 metal housing
- Axial or radial optics, cable or connector
- Standard 4-wire NO-NC NPN or PNP output

Applications

- Processing and Packaging machinery
- Conveyor lines, material handling
- Ceramics intralogistics
- Automated warehousing

S100 IO-LINK

The S100 sensors are a cost-effective standard miniature family with universal double-mounting holes and complete optical functions for any general detection application.
The S100 Sensor family is increased with the addition of IO-link connectivity. The new models B10 polarized RRX, M10 background suppression, and T10 RRX for clear objects will have a very complete IO-Link parametrization and diagnostics using the smart sensor profile and the last revision of the IO-Link stack.
The new Datalogic ASIC platform improves some S100 detection features, increasing the B10 (RRX polarized) operating frequency up to 1 kHz and increasing the M10 (BGS) distance on darker targets, reducing the B/W shift.
Additionally, the S100 family will be enriched with the inclusion of a new contrast sensor for mark detection optical function W00 with a high frequency up to 20 kHz, 13us jitter and high contrast sensitivity. The W00 function is available in two models: with IO-Link or with standard switching outputs and remote input.
These new models are available with double channel IO-Link connectivity and separate digital configurable I/O without digital output jitter when IO-link communication is active.

Features & benefits

- Same backwards compatible mounting features
- Improved detection features for the Background Suppressor models (M10)
- Improved operating frequency for polarized RRX (B10)
- High frequency contrast sensor (W00) with low jitter
- Improved cross talk and EMI immunity
- Smart sensor profile with smart functions
- IO-Link connectivity with separate configurable I/O
- No jitter on the digital output with active I/O-Link communications

Applications

- Processing and packaging machines
- Conveyors
- Automatic warehousing
- Intralogistic lines
- Bottling
- Cosmetic and Pharma machinery
- Industry 4.0 application compliant

IO-Link

The Datalogic IO-Link Master combines the benefits of the IO-Link standard with the popular industrial protocol like EtherNet/IP™, Modbus/TCP and Profinet as well. It will accomplish the gateway functionalities between the field level sensor network and your field bus implementation network, making retrofitting or expansion system faster and simple. The IO-Link Master features a rugged IP67 slim-line design suited for industrial grade applications with two Fast Ethernet ports and eight IO-Link ports with Class A M12 connectors. The IO-Link Master is easily integrated into factory automation networks and is compatible with both IO-Link and digital IO sensor technologies. The device Web Server technology will give you a lot of flexibility in terms of set up and device configuration making your integration job easier. The Datalogic IO-Link Master is able to integrate completely the data from IO-Link sensors (status, events, process data) with your IoT Hub and at the same time the acquisition of the same data by your PLC control system. The embedded OPC-UA connectivity can enable the system to use directly cloud based applications and analytics tools without overloading your control network.

Features & benefits

- Eight port IO-Link Master to ETH-IP and to PROFINET IO
- EtherNet/IP™ Class 1 (Implicit) and Class 3 (Explicit) interfaces
- Rugged IP67 housing desing for harsh environments,
- M12 connectors allowing up to eight sensor or actuator connections on one master block
- Simultaneously provides IO-Link device access to multiple controllers
- HMI, SCADA, and PLC access to IO-Link ISDU blocks without complex programming
- Power port sharing capability
- PLC access to IO-Link ISDU blocks without complex programming
- Powerful web GUI for configuration and diagnostics, including: IO-Link device management using the IO-Link device manufacturers IODD file for easy device configuration, Automatic data storage (upload and download), Manual data storage (upload and download), Device valida-tion, and Data validation.
- PLC access to IO-Link ISDU blocks without complex programming
- Supports the IOL_CALL function module
- Additional digital input on every port
- Wide operating temperature (-25° to +60°C)

Applications

- Integration of IO-Link sensor with Field Bus Systems.
- Process Automation Monitoring and Control.
- Predictive maintenance.
- Machine Monitoring and Productivity
- Intelligent and Smart mass product organization
- Smart sensor application technology
- Smart factory and Industry 4.0 applcations

IO-Link

The new S65 time of flight sensor is a breakthrough concept in background suppression technology. With advanced OptoASIC, the new S65 background suppressor is a cost effective solution for any application where conventional proximity sensors cannot perform due to technology limitations. The new S65 is capable to detect any medium and big size object, with color independency, at longer distance than conventional sensors. The IP67 50x50x25mm S65 compact housing encompasses state-of-the-art technology for the detection of objects with white surfaces up to 5 m. The infrared light emission ensures the highest level of human eye protection in any application. Additionally, the S65's green LED spot pointer system allows for fast and precise object alignment. This new Time of Flight sensor has an easy-to-use interface and flexible connection capability, with two setting points and two independent switching outputs. The S65 delivers a flexible and programmable IO-Link standard interface.

Features & benefits

- Up to 5m on white target 90 % remission
- 20 mm resolution
- 20 mm histeresys on any target surface and type
- 50 x 50 x 25 mm S65 compact housing
- IP67 mechanical protection
- –20 °C...55 °C operating temperature
- Infrared light emission / Green LED spot pointer
- Two independent switching outputs (S65-PA-5-M13-OO)
- PNP/NPN ouput selectable by user

- Cost effective solution for any application
- Detects objects without surface or color dependance
- 50 X 50 x 25 mm S65 compact housing
- Detection distance on white 90% up to 5 m
- Infrared light emission ensures the highest level of human eye protection
- Green LED spot pointer system for fast and precise object alignment
- Two setting points and two independent switching outputs
- IO-link standard interface available

Applications

- Logistic Applications.
- Long range detection objects.
- Long range Back Ground Suppression
- Material Handling

Detection and safety solutions

S70 IO-LINK

IO-Link

The new S70-5-E3 extends and completes the current high performance double display fiber optic S70 amplifier family, enhancing the present Datalogic solution portfolio for any packaging and bottling industry application. Thanks to its great detection stability, sensitivity and precision, the S70-5-E3 is able to catch very smooth irregularities or small embossed patterns on any kind of shiny or transparent surfaces like different type of glasses and metals.

The new S70-5-E3 is supplied with two different analog output types, which can operate in current or voltage mode. The high capability of product parametrization and the easiness of use make the S70-5-E3 a real breakthrough solution for any kind of peculiar and high precision application.

The IO-Link interface and connection V1.1 and the smart sensor profile make this sensor a great solution in all the applications where the format change and the programming flexibility even 'on the fly' accelerating the production and enhancing the variety handling.

Features & benefits

- Double display
- Long distance
- Fast analog response time up to 250us
- Digital output
- Large Parametrization
- Easy user interface
- 12bit resolution
- Single and double Teach mode
- IO-Link Smart sensor profile V1.1
- DIN rail mountable models with dual digital displays
- Teach-in setting via +/SET/- push-button/switch, remote input or IO-Link
- Dynamic Teach and Output Window setting function
- Programmable voltage analog out up to 10V or up to 5V
- Programmable filtering for high analog output stability
- Very high sensitivity and detection resolution
- Double display for easy setting and monitoring
- IO-Link v1.1 with smart sensor profile and Digital output

Applications

- Labelling machinery for bottling application
- Very precise transparent object detection
- Level detection in small objects
- Processing and Packaging machinery
- Electronics assembling
- Pharmaceutical industry

LASER SENTINEL™

LASER SENTINEL is the innovative solution for safe area scanning, targeting a large variety of applications in automation and intralogistic industries, especially targeting robots and AGVs applications.

In addition to the basic safety function of providing a safe stop signal when a person is detected in the area, a number of important features have been implemented in order to respond to the diverse needs in the world of automation, such as the double warning area, the second and third safety zone, the master-slave connection, the muting and override functions for vertical applications, the encoder inputs to safely monitor the speed of a vehicle.

An intuitive Graphic User Interface allows users to easily program LASER SENTINEL step by step.

The innovative color graph display gives immediate information about the intrusion position.

Features & benefits

- Type (EN61496-1): 3
- PL (EN ISO 13849-1): d
- SIL (IEC 61508): 2
- Resolution: 30/40/50/70/150 mm selectable
- Maximum distance: up to 5.5 m (safe) for 70 mm resolution
- Opening angle: 275°
- Minimum response time: 62 ms
- Power supply (Vdd): 24 VDC ± 20%
- Dimensions (w,d,h): 102 , 112.5 , 152 mm
- Operating temperature: -10°C ...+50 °C
- Humidity: 15 ... 95 % (no condensation)
- Mechanical protection: IP65
- All necessary safety functions for all applications in a compact size

- Easy programming of the system with intuitive Graphic User Interface laser
- The only safety laser scanner on the market with partial dynamic muting
- Advanced measurement data protocol, for AGV direct navigation
- Up to three zones available at the same time
- Mono and Bidirectional Muting
- Muting dependent Override
- Programming, monitoring and measurement data available over Ethernet
- Up to 4 scanners can work together without any need of external controller
- 70 zone sets switchable with 8 digital inputs or speed value
- Encoder inputs for safe speed monitoring

Applications

- Robot cells
- Automated Guided Vehicles
- Material handling
- Automatic machinery (packaging, assembly, wood, ceramics)
- Palletizers/ Depalletizers

◆DATALOGIC

NOTES

INSPECTION AND GUIDANCE SOLUTIONS

IMPACT

DATALOGIC
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SMART-VS

The Smart-VS is a Smart VisIon Sensor with learning ability and sensor setting simplicity suitable for any presence and orientation object detection.

The Smart-VS can solve all the applications when a very simple and easy installing procedure is requested without the need of particular smart camera skills.
Thanks to its algorithm technology the Smart -VS can solve the application problems related to machine format adaptability and flexibility that a sensor or a sensor system can't solve it in the same easy and simple way.
The Smart-VS can solve effectively applications where low budget does not allow the use of an expert camera but there is still the need to achieve medium complexity with a simple and easy implementation.
The application field addressed can be very different in secondary packaging and automotive industries in food and beverage applications for bottling, cosmetic packaging and in all the markets where detection applications are needed.

Smart-VS is provided with a simple and effective WEB-Server GUI for simple settings and maintenance purposes.

Features & benefits

- Electronic focus control
- 50...150mm operating distance
- TEACH Button and comprehensive UI
- Easy Setting of object detection sensor like
- No need of skilled installer to make it working
- Fast mounting accessory
- Eth point to pont commmunication available
- Easy Machine output interface sensor like
- Algorithm for fast and simple application set up
- Easy and Intuitive WEB Server GUI for maintenance and job setting

Applications

- Processing and Packaging machinery
- Conveyor lines and material handling
- Assembling lines
- Food and Beverage
- Bottling lines
- Cosmetic

DATALOGIC IMPACT ROBOT GUIDANCE

The Datalogic IMPACT Robot Guidance URCap Plugin is the software platform with a comprehensive set of tools which allows users to quickly and easily interface between any Datalogic Smart Camera or Industrial Vision Processor and a Universal Robots cobot.

With a simple calibration and setting of a pick point, your robot guidance application will be up and running with minimal effort.

Datalogic's IMPACT software is a proven platform that lets users solve not only guidance, but many other machine vision applications with an intuitive drag and drop interface. With over 100 vision tools and a suite of hardware options you will be able to solve your robot guidance and other inspection needs.

Features & benefits

- Easy: calibrate and set up your Pick point with ease by going through the Reference Manual.

- Fast: reduce the time needed to learn and install a vision system by using the intuitive drag and drop programming environment of Datalogic IMPACT software.

- Accurate: have a fast and accurate vision guided robots by using the Pattern Find or other locate tools located within Datalogic's IMPACT Software.

- Over 100 vision tools for any inspection needs

- Productivity improvement: working hand-in-hand with robots operators are able to ease their workload and increase productivity

Applications

- Guidance
- Object Location

MX-E SERIES

The updated Industrial Vision Processors have faster processing, more RAM, and up to 8 POE camera ports so our customers will be able to solve more inspection applications. The total cost of ownership is reduced by having one processor able to connect multiple cameras to cover more inspection points with one processor.

Like the existing offering there will be three tiers of processing power. The MX-E25 is an entry level, affordable processor capable of connecting to two 5-megapixel cameras. The MX-E45 has multi-core processing and can connect to four cameras. The MX-E90 is highest performing processor. With 32 GB of RAM, quad core processing, and the ability to connect to 8 cameras, users can inspect faster and process more pixels to fully optimize their operation.

Now with the updates to the MX-E Industrial Vision Processors, Datalogic's customers can run their machine vision applications faster, process higher resolution images, or add more cameras to fully optimize their operation.

Features & benefits

- State-of-the-art processors and the highest-quality, industry leading hardware components
- New Operating System: Windows 10 IoT Enterprise
- 5 MP Camera support (mono and color) for the MX-E25
- Rugged, industrial, high-powered vision processors
- Three models for different performance levels
- Compatible with a wide range of cameras from VGA up to very high resolution, grayscale and color, Area Scan and Line Scan cameras
- Up to eight Power over Ethernet (PoE) camera ports – PoE compliant cameras need no power
- Universal dongle for easier SW license management
- Complete IMPACT software suite included for ultimate programming flexibility – addresses any inspection and user interface needs

Applications

- Guidance
- ID/Traceability
- Gauging
- Flaw detection
- Object location
- Content verification
- Hazardous label detection

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