

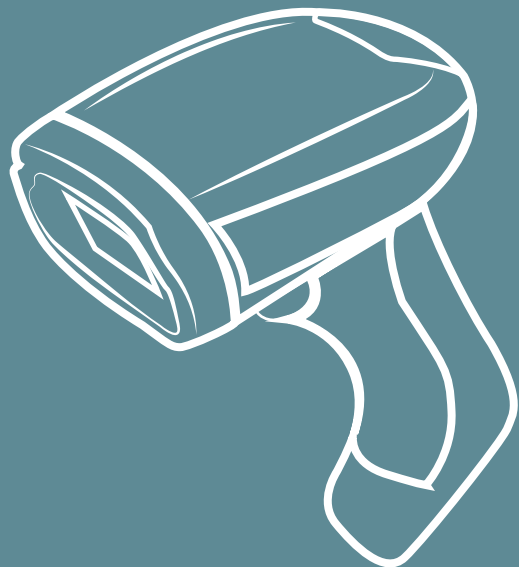
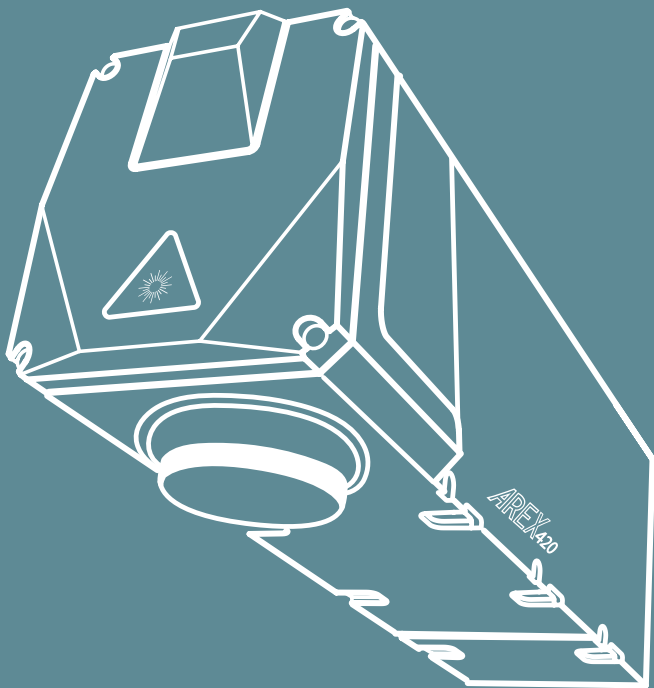
NEW PRODUCTS

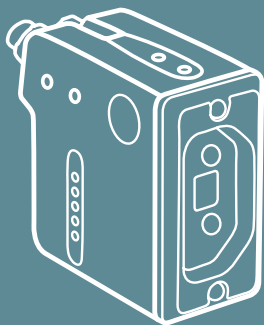
BROCHURE 2018/2019

Connect...

Internet of Things network smart factory solution. Manufacturing intelligence automation
Smart factory impact with next generation robot to
Automation robot system smart factory solution. Internet of things network smart factory solution. Industrial
Smart factory impact with next generation robot to
Automation robot system smart factory solution. Internet of things network smart factory solution. Industrial
Smart factory impact with next generation robot to
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Smart factory impact with next generation robot to
Automation robot system smart factory solution. Internet of things network smart factory solution. Industrial

TRACEABILITY SOLUTIONS





TRACEABILITY SOLUTIONS

MATRIX 120™



Matrix 120 is an ultra compact industrial 2D imager in the market to fit any integration space and the smallest compact 2D imager with embedded Ethernet connectivity. Matrix 120 leads the market for Customer Ease of Use and is characterized by top Industrial grade in its class.

With only a few models, Matrix 120, covers all of the targeted application in the OEM and Entry Level Manufacturing industries. Matrix 120 is the entry level solution with the most complete high performance industrial 2D imaging range (Matrix Series) in the ID market.

Features & benefits

- Ultra compact dimensions for easy integration
- Outstanding performance
- Smart user selectable focus for high application flexibility
- DL.Code for ease of setup
- Xpress, Green Spot and intuitive HMI for top ease of use
- WVGA 1.2 MP; 1.2 MP Wide Angle model
- Serial, USB, Embedded Ethernet connectivity
- ESD Version
- Polarized Version
- Top Industrial grade: IP65, operating temperature: 0-45°C

Applications

- Electronics – Track and trace PCB board manufacturing
- Print and Apply – Label verification
- Food and Beverage – traceability
- OEM: Kiosks – ticketing machine
- OEM: 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

- Compact dimension and superior performance in its class
- New All-In-One DPM illuminator for strong DPM reading performance
- 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 YAG protection are front cover accessories
- New multicore image processing platform excellent for high speed applications
- Hardware Acceleration to speed up algorithms
- 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 to 50°C /14 to 122 °F

Applications

- Electronics: tracking/tracing of electronic products and components, DPM bar code reading
- Automotive: DPM code validation after marking, work-in-progress control, parts and assembly traceability
- Packaging: primary packaging bar code reading, package traceability, food and beverage applications
- Document handling: fast decoding for high speed applications



DATALOGIC TECHNOLOGY ON LINEAR CODES

New innovative Datalogic technology provides a green scanning line delivering the same crisp definition of a laser line with the added benefits of a linear imager. The result is outstanding 1D decoding capability.

READING CAPABILITY

Extended reading range. Capability of decoding low contrasting bar codes up to 15% PCS, including damaged or poorly printed bar codes, and high resolution bar codes up to 2.5 mils.

Ability to read LCD screens on mobile devices.

RUGGEDNESS AND ERGONOMY COMBINATION

The PowerScan 9100 series shares the rugged, ergonomic housing of all PowerScan scanners that are built to offer durability in tough environments.

FULL CONNECTIVITY

The BC9180 is provided with Standard Multi-Interface: USB-KBD, USB-COM, USB0EM, RS-232 and Ethernet connectivity: Telnet, Web Server, Data Socket, Ethernet/IP.

A FULL SUITE OF MODELS

The PowerScan 9100 family is available in a full suite of models to provide the best solution for different customer needs: corded desk models; cordless models featuring Datalogic's STAR Cordless System™ proprietary radio or Bluetooth® wireless technology.

The PowerScan series is also available as a 2D IMAGER and a DPM version.

Features & benefits

- Ultra compact dimensions for easy integration
- Outstanding performance
- Smart user selectable focus for high application flexibility
- DL.Code for ease of setup
- Xpress, Green Spot and intuitive HMI for top ease of use
- WVGA 1.2 MP; 1.2 MP Wide Angle model
- Serial, USB, Embedded Ethernet connectivity
- ESD Version
- Polarized Version
- Top Industrial grade: IP65, operating temperature: 0-45°C

Applications

- Electronics – Track and trace PCB board manufacturing
- Print and Apply – label verification
- Food and Beverage – traceability
- OEM: Kiosks – ticketing machine
- OEM: Chemical and biomedical analysis machines–vials identification



DPM TECHNOLOGY

Direct Part Marking (DPM) is a process that allows users to imprint a bar code directly on an item instead of printing the code on a paper label. Different technologies are available to directly mark objects: laser/chemical etching, dot peening and ink jet printing. The PowerScan 9500-DPM product series are rugged handheld area imagers specifically addressed and capable of reading codes marked with any type of DPM.

READING CAPABILITIES

The PowerScan DPM series from Datalogic make the reading of codes with DPM easy and intuitive. The typical reading distance is from contact to 4.5 cm / 1.7 in, depending on the DPM technology used, the code resolution and the material and surface type. The scanner is also capable of reading standard bar codes on printed labels.

A soft pulsed white illumination light results in reduced flashes and is very gentle to the eyes.

FULL CONNECTIVITY

The BC9180 is provided with Standard Multi-Interface: USB-KBD, USB-COM, USB0EM, RS-232 and Ethernet connectivity: Telnet, Web Server, Data Socket, Ethernet/IP.

MOTIONIX™ MOTION-SENSING TECHNOLOGY

Datalogic's Motionix motion-sensing technology detects the natural actions of the operator to automatically switch the scanner into the desired scanning mode.

The PowerScan series are also available in IMAGER models.

Features & benefits

- Dimensions: 21.2 x 11.0 x 7.4 cm/8.3 x 4.3 x 2.9 in
- Weight: 330.0 g/11.6 oz
- Interfaces: RS-232/USB/Keyboard Wedge Multi-Interface
- Particulate and Water Sealing: IP65
- Operating Temperature: -20 to 50 °C/-4 to 122 °F
- Current: Operating (Typical): 350 mA;
- Standby/Idle (Typical): 120 mA
- Input Voltage: 5 VDC +/- 10%
- Resolution (Maximum): 1D Codes: 2.5 mil; 2D Codes: 4 mil
- Decoding Capability: 1D/linear codes: Autodiscriminates all standard 1D codes including GS1 DataBar™ linear codes
2D codes: Aztec Code; China Han Xin Code; Data Matrix; MaxiCode; Micro QR Code; QR Code
Postal Codes: Postnet; Royal Mail Code (RM4SCC)
Stacked Codes: EAN/JAN Composites; GS1 DataBar Composites; GS1 DataBar Expanded Stacked; GS1 DataBar Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF; MicroPDF417; PDF417; UPC A/E Composites

- 2D codes: Aztec Code; China Han Xin Code; Data Matrix;
- MaxiCode; Micro QR Code; QR Code
- Postal Codes: Postnet; Royal Mail Code (RM4SCC)
- Stacked Codes: EAN/JAN Composites; GS1 DataBar
- Composites; GS1 DataBar Expanded Stacked; GS1 DataBar
- Stacked; GS1 DataBar Stacked Omnidirectional; MacroPDF;
- MicroPDF417; PDF417; UPC A/E Composites
- Supports any kind of Direct Part Marked (DPM) code
- Datalogic's Motionix motion-sensing technology
- Image capture
- Datalogic's 3GL™ (3 Green Lights) technology and loud beeper for good-read feedback
- Water and Particulate Sealing Rating: IP65

Applications

- Electronics – Track and trace PCB board manufacturing
- Print and Apply – label verification
- Food and Beverage – traceability
- OEM: Kiosks – ticketing machine
- OEM: Chemical and biomedical analysis machines–vials identification

TRACEABILITY SOLUTIONS

POWERSCAN™ 9500 LONG RANGE



EXTENDED READING RANGE WITH POWERFUL AUTOFOCUS SYSTEM

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.

EASY IDENTIFICATION OF THE AIMING CODE

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 BEST SOLUTION FOR DARK ENVIRONMENTS

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

CODE RESOLUTION

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

RUGGEDNESS

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: 2 mil; 2D Codes: 3 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 2 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

GRYPHON™ CORDED AND WIRELESS



The Gryphon 4500 series represents the premium range of hand held scanners from Datalogic for general purpose applications. Designed with people in mind, the Gryphon 4500 series stands out with its elegant and trendy design, the unchallenged ergonomics, and features the most advanced Megapixel sensor with white-illumination 2D technology for outstanding performance.

Featuring Bluetooth® wireless technology (GBT model) or narrow band radio communications with Datalogic's STAR Cordless System™ (GM model), the Gryphon 4500 wireless readers provide maximum flexibility to solve any end user application with the best technical solution. One of the most important technical innovations that the Gryphon 4500 wireless readers achieve is the wireless charging system for the battery, which enhances the reliability of the entire solution, while lowering the total cost of ownership (no need for contact cleaning or maintenance procedures).

Features & benefits

- 1 MP optics for superior scanning and DOF
- Datalogic distinctive technology with highly visible white-illumination and 4-Dot aimer with center cross for targeted scanning
- Image capture and document scanning capabilities
- Choice of Bluetooth wireless technology version 4.0 with BLE or Datalogic STAR Cordless System (433 MHz or 910 MHz)
- Wireless battery charging system
- Adjustable position cradle with Scan-While-Charging capability Ultimate design and undisputed ergonomics
- High-res megapixel sensor for outstanding results
- Wireless charging (no need for contact cleaning or maintenance procedures)
- Healthcare dedicated models 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



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.



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.

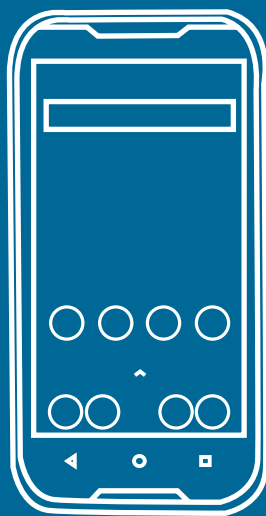
Features & benefits

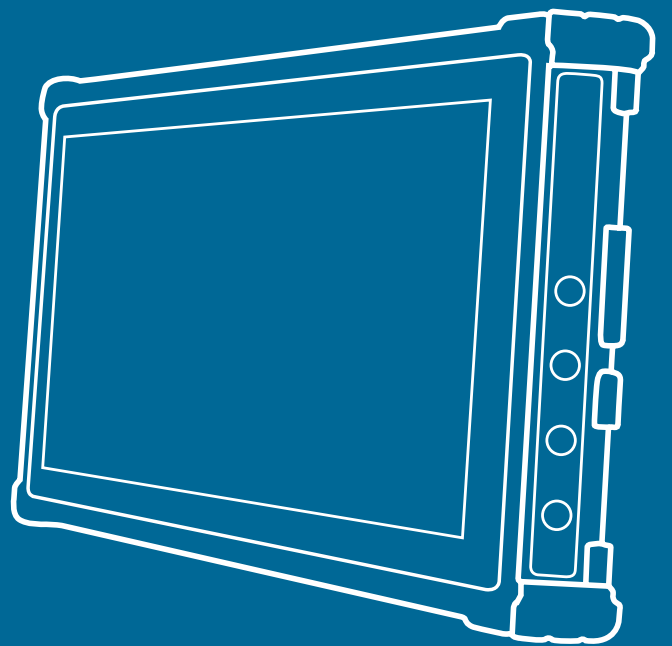
- Unified, full graphical interface for Laser Marking and Code Reading
- Object-related Laser Properties and ID configuration
- Simplified reader connection and setup
- Auto setup and auto tuning features
- Multi codes verification
- Code Image storage
- Advanced statistics informations

Applications

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

MOBILITY SOLUTIONS





MOBILITY SOLUTIONS

MEMOR™ 1



The Memor 1 device comes with a powerful Qualcomm Snapdragon platform and features Android™ 8.1 (Oreo) with GMS. This device is available in two form factors: a hand held version resembling a rugged smartphone or a pistol-grip version with a comfortable trigger. The robust black enclosure allows this device to be used in most any application.

The Memor 1 device is charged using state-of-the-art wireless charging technology that eliminates the need for cleaning contacts on the device and cradles. It radically reduces support costs and increases its life span. The Memor 1 device can also be used as a phone or PTT device using the Voice over Internet Protocol (VoIP), leveraging your Wi-Fi network for communications.

Features & benefits

- Display: 4.3 inch full touch TFT-LCD color display; FWVGA: 854 x 480 pixels; 16M colors, LED backlight
- 2 form factors
- Memory: System RAM: 2 GB; System Flash: 16 GB Flash Disk
- Operating System: Android 8.1 (Oreo) with GMS
- Multi-purpose device: hand held or pistol-grip
- Wireless charging eliminates all contacts on the device and cradle
- Presentation mode allows hands-free scanning
- Advanced 2D imaging technology with image capture
- 4.3 inch capacitive multi-touch FWVGA display with Gorilla® Glass 3
- Supports both Boost and Fast charging modes

Applications

- Retail (Inventory, Access Control, Assisted Sales)
- Manufacturing (Quality Control, Inventory)
- Logistics (Inventory, Picking/Packing, Shipping/Receiving, Track & Trace)

MEMOR™ 10



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

- Memory: System RAM: 3 GB; eMMC Flash: 32 GB
- Expansion Slots: Micro-SD card slot: Compatible with Micro SD-HC cards; Data transfer up to 48 Mbps; User-accessible
- Microprocessor: 2 GHz Octa-core
- Operating System: Android v8.1 with GMS
- Display: 5 inch IPS HD resolution 720 x 1280; LED backlight; Touch Screen: 5 points multi-touch capacitive panel with Dragontrail hardened glass
- WLAN: IEEE 802.11 a/b/g/n/ac and 802.11 k/r/v; Frequency range: Country dependent, typically 2.4GHz and 5GHz bands
- WPAN: Bluetooth wireless technology v4.2 (Classic Bluetooth wireless technology and BLE)
- Android 8.1 (Oreo) with Google Mobile Services
- Wireless charging eliminates all contacts on the device and cradle
- Dual band Wi-Fi including the latest 802.11ac standard and 802.11r/k for fast roaming
- Full suite of cellular connectivity for voice and data, featuring LTE-Advanced/4G+
- Assisted GPS for location based apps
- NFC for proximity communications

Applications

- Retail (Sales, Inventory, Access Control)
- T&L (Route Accounting, Deliveries, Management)
- Manufacturing (Production/Quality Control, Inventory)
- Healthcare (Pharmacy, Bedside Care, Inventory, Labs)



The Skorpio 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. Users will never run out of memory with the standard 1 GB RAM and 8 GB Flash.

Equipped with the largest high-visibility 3.2 inch color display touch screen in its class. Three different keyboards are available for maximum efficiency: a 50-key alphanumeric keypad, a 38-key functional keypad and a 28-key numeric keypad.

The Skorpio X4 mobile computer's wireless communication capabilities (802.11 a/b/g/n) enables speedy transmission of data, while Bluetooth® wireless technology v4 provides support for the new low energy mode (BLE). The new MIMO antennas provide extended coverage.

Features & benefits

- 2 Operative Systems: Windows and Android
- TI OMAP 4 @1 Ghz CPU
- 1 GB RAM/8 GB ROM
- IP64 - 1.8 m / 6.0 ft drop specs
- 2 form factors
- 1D/2D scan engine
- 3 choices of keyboards
- 2 choices of Operating Systems
- Robust and ideal for harsh environments
- Pistol grip and hand held models
- 1D and 2D choices of scan engine
- Standard and extended battery
- One bay and multi-bay cradles (with Ethernet)

Applications

- Inventory
- Ordering
- Shipping/Receiving
- Quality control
- Picking



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 802.11 a/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
- 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
- New 2D Auto Range option now available

Applications

- Warehouse and Distribution Centers: Retail, Wholesale, Manufacturing, Automotive/ Industrial, Electronics, Food/Beverage, Consumer Products, Pharmaceutical, Third Party Logistics (3PL)

MOBILITY SOLUTIONS

RHINO II™



Android NOW available!

RUGGED VEHICLE MOUNTED COMPUTER

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.

WAREHOUSE MANAGEMENT

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.

VERSATILITY

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.

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

SH15/SH21



INDUSTRIAL COMPUTERS

SH15 Blackline and SH21 Blackline are the latest generation of industrial computers providing extreme reliability under the toughest conditions. Targeted for warehouse and factory shop floor applications, these industrial touchscreen computers can be used for fixed applications and in the case of SH15, also for vehicle applications where a rugged and sealed device is mandatory.

PERFORMANCE AND RUGGEDNESS

These Blackline computers preserve all the rugged features found in the related Rhino II™ VMC: a sealed design tested to IP65/IP67, a capacitive touch display with 3 mm anti-glare armored glass, excellent Wi-Fi roaming capability and much more.

VERSATILITY

The SH15 Blackline computer is a rugged vehicle mount computer (VMC) as well as a fixed mount unit for use in any industrial application. The SH15 Blackline offers the built-in 12-48 VDC or the 110/230 AC power supplies while the SH21 Blackline, mainly designed for wall/fixed mount, offers only the high efficiency 110/230 AC power supply.

Features & benefits

- Wi-Fi: 802.11a/b/g/n (2.4 GHz and 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: Windows 10 IoT
- Processor: Intel Atom E3845 Quad Core 1.91 GHz; Intel i5-5350U Dual Core 1.8 GHz
- Memory: RAM: 4 GB / 16 GB
- Storage: 32 GB CFast SSD (optional 64/128 GB)
- 15 inch or 21 inch high resolution color display
- Integrated high-efficiency power supply for both DC (only SH15) and AC applications
- 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

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 (SH15 only)



RUGGED TABLET

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.

SINGLE HAND 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.

VEHICLE MOUNT SOLUTION AS WELL

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)



The solution 'PowerScan 9XXX + SD9030 dongle + Rhino II' 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 the Rhino II 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

- 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

POWERSCAN

- Decoding Capabilities: 1D / Linear Codes, 2D Codes, Postal Codes, Stacked Codes

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
- Multiple choice of O.S. for an easy integration with the existing system
- Innovative green laser-like technology and outstanding performances on linear codes
- Top industrial grade, full solution IP65 certified
- Datalogic's STAR cordless system 2.0 proprietary narrow band radio
- Compact size receiver and universal bracket for an easy installation
- PowerScan holder specifically designed for Rhino II

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

SAFETY SOLUTIONS



SAFETY SOLUTIONS

LASER SENTINEL™



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

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 master-slave connection, the muting and override for vertical applications.

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: 40/70 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%
- Programming, monitoring and measurement data: Ethernet UDP
- Dimensions (w,d,h): 102 , 112.5 , 152 mm
- Operating temperature: 0°C ...+50 °C
- Humidity: 15 ... 95 % (no condensation)
- Mechanical protection: IP65

(*) With SLS-M model, available in 2019

- All necessary functions in a compact size
- Easy programming of the system with intuitive Graphic User Interface
- More than 72 square meters are monitored, thanks to 5.5 m radius over 275°
- 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 *
- 10 switching zones possible with digital inputs *

Applications

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

SG4 FIELDBUS



SG4 FIELDBUS is the first safety light curtain with integrated openSAFETY protocol over POWERLINK network.

Adding the POWERLINK interface to the field-proven SG4 light curtain platform allows for a new solution for safety that's easy to integrate in existing networks and communicates seamlessly with Safety Programmable Controllers through openSAFETY protocol. These features result in less wiring and hardware, fewer errors in commissioning and maintenance and an increase the overall machine availability. New advanced functions, such as blanking and muting, will be integrated for increased flexibility to the safety functionality of the machine.

With finger, hand and body protection, the SG4 FIELDBUS model can be implemented in any application where standard SG4 safety light curtains are currently used, in a wide range of industries such as food & beverage, packaging, machine tools, warehouses, wood, ceramics.

Features & benefits

- Type (EN61496-1): 4
- PL (EN ISO 13849-1): e
- SIL (IEC 61508): 3
- Resolution: 14/30 mm or 2/3/4 beams
- Protected height: 150 ... 1800 mm
- Operating distance: up to 20 m (depending on resolution)
- Power supply (Vdd): 24 Vdc ± 20
- openSAFETY protocol over POWERLINK
- Operating temperature: 0 ...+55 °C
- Humidity: 15 ... 95 % (no condensation)
- Mechanical protection: IP65

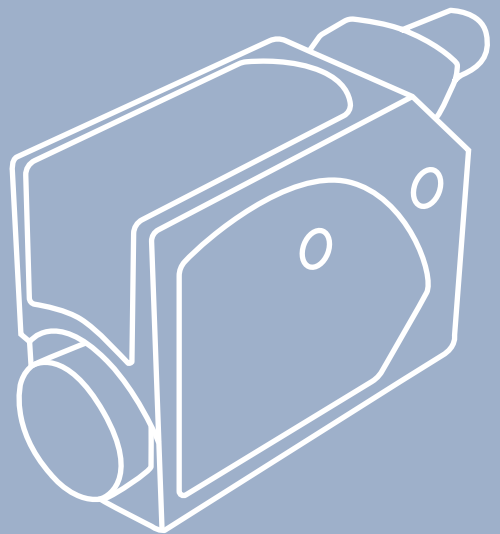
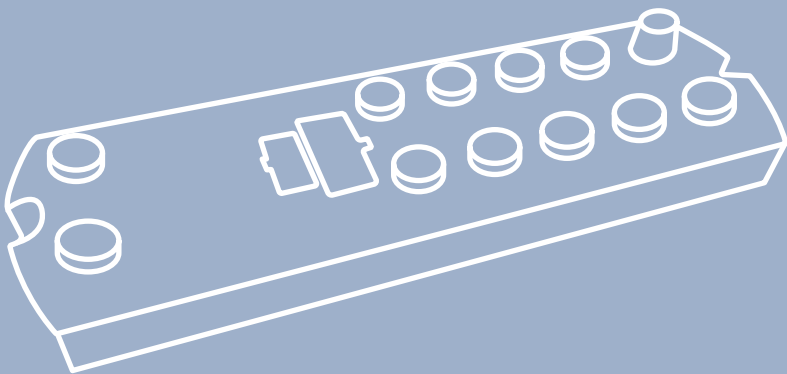
- Easy integration in existing POWERLINK networks
- Safety information sent to Safety Controllers through openSAFETY protocol
- Reduction of wiring
- Limitation of commissioning errors
- No need for manual parameter configuration
- Faster and safer maintenance
- Complete diagnosis available to Controllers and HMIs

Applications

- Metal working
- Material handling
- Primary and secondary packaging
- Machine tools
- Warehouses
- Automotive
- Food & beverage

DETECTION SOLUTIONS





DETECTION 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, S50 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 S50 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

S65N 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-M13-00)
- 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



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



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 validation, 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 applications

DETECTION SOLUTIONS

S3Z



The Datalogic well established S3Z miniature sensor family has been enhanced with 18 new models with Light and Dark trimmer on board. The addition of the Light and Dark trimmer makes the product selection easier without struggling with part numbers to settle the Light or Dark switching mode.

The single trimmer models has been maintained for customer backwards compatibility and price effective projects. All double trimmer models have the LED Emission. The LASER Emission models are already equipped with L/D trimmer.

Features & benefits

- Through beam 0...15 m, 0...30 m (class 1 LASER)
- Polarized retroreflective 0.05...4 m, 0.3...10 m (class 1 LASER)
- Retroreflective for transparent (on R2 reflector) 0...2 m
- Diffuse proximity 0...700 mm, 50...150 mm (narrow beam)
- Background suppression 50...250 mm, 40...300 mm (class 1 LASER)
- 50-250 mm background suppression
- 0.7 m proximity, 150 mm with narrow beam
- 4 m polarized retroreflective
- 15 m through beam
- Light and dark trimmer models
- Standard 3-wire output configuration

Applications

- Processing and Packaging machinery
- Electronics assembling
- Transportation lines, material handling
- Automatic warehouses
- Cosmetics and Pharmaceutical industry
- Small part detection with maximum accuracy

TL46-WE



The new TL46-WE contrast color sensor thanks to its high performance coaxial optics and RGB emission can detect very critical color mark with critical color background. The sensor can solve very critical application by its innovative double mode setting, selecting the appropriate RGB emission accordingly to the contrast or the color Mark and color Background combination.

The enhanced 12-bits sensitivity and double setting mode Mark/Color will enable the sensor to ensure optimal sensing for more stable detection even in cases of very bad contrast and Signal to Noise ratio level. The Mark mode detects and analyzes the contrast with 12-bits enhanced resolution, setting the appropriate RGB emission during the acquisition phase and running in detection mode at 33 kHz speed. The Color mode detects and analyzes continuously, with RGB on the fly light emission, the color contrast level between the mark and background running at 10 kHz switching frequency.

The TL46-WE is also provided with useful setting and flexible parametrization like dynamic setting, color tolerance and much more, solving and covering all the possible gap and peculiarities on the application field.

Features & benefits

- 16 us detection Jitter
- 33 kHz contrast mode operating frequency.
- 10 kHz color mode operating frequency
- Dynamic teaching
- Remote input for remote sensor setting
- Powerful and precise RGB emission
- 10 kHz operating frequency with color contrast.
- Color tolerance adjustable.
- Double detection mode for contrast and color detection.
- Dynamic teaching.
- Remote input for remote sensor setting.

Applications

- General and Challenging applications for Primary packaging machinery
- High Speed machinery for packaging applications
- High Accuracy in contrast detection

GUIDANCE SOLUTIONS





Typical robot pick and place applications require accurate and repeatable positional data of objects at high speeds. The Pattern Find tool is part of a portfolio of locating and other tools within IMPACT to address accurate guidance in addition to other machine vision inspections. By combining the ease-of-use environment of IMPACT Software with the high-speed, highly accurate, and repeatable Pattern Find Tool, Datalogic provides the performance needed in today's market.

Features & benefits

- **Software Required:** IMPACT Software with Enhanced License
- **Supported hardware:** MX-E20, MX-E40, MX-E80, MX-U81 vision processors
- **Camera Support:** Wide Range of Gig-E or USB3 cameras from VGA to 20MP resolution
- **High recognition rate** to robustly find the most challenging patterns
- **Subpixel accuracy** needed for precision pick and place applications
- **High speed** – the ability to take advantage of the processors multi-core meet the demands of the fastest production lines

Applications

- Automotive, Electronics, and Packaging industries that require Robot Guidance pick and place and Object recognition



Pattern Sorting Tool is a unique machine vision software tool that is able to recognize thousands of different objects according to their appearance, allowing to identify products even without bar codes. Based on a leading-edge software algorithm, this pattern recognition tool delivers robust object identification in any condition (360° pattern rotations, perspective distortions, different scales and light variations). It can find objects even if they are partially hidden or in a cluttered field of view. This tool is a tremendous breakthrough in the machine vision industry. Currently, no algorithm is able to offer a reliable and robust recognition over such wide pattern databases. Datalogic vision processors powered by IMPACT enable countless machine vision applications for pattern recognition and sorting.

Features & benefits

- Intuitive and user-friendly pattern recognition tool: add new patterns with a click
- Capability of discriminating similar patterns looking at small differences including different colors
- Multiple pattern detection within one inspected image and large pattern database management
- Recognition of patterns with random orientations, out-of-plane rotations and different scaling
- Automatic unknown pattern training and labelling
- **Software required:** IMPACT Software with add-on Pattern Identifier license
- **Supported hardware:** MX-E40, MX-E80, MX-U81 vision processors
- **Camera support:** AV7000 linescan camera and a Wide Range of Gig-E or USB3 cameras from VGA to 20MP resolution

Applications

- Content vs. label cross-check
- Content vs. package graphics cross-check
- Product identification and sorting
- Package vs. pallet label cross-check
- Tote content vs. bar code cross-check
- HazMat label detection
- Soft packaging robot picking

