The new DS8100A, a high-performance linear laser barcode reader, is designed to satisfy the key needs of sorting applications in the Transportation & Logistics arena. With top-class reading performance and flexibility of use, DS8100A is the standard reader for the most challenging applications and competitive solutions.

- **EXCELLENT READING PERFORMANCE**
  The Datalogic DS8100A is based on ASTRA™, an innovative and patented multiple-diode switching technology that guarantees excellent reading performance through the use of real-time focusing on an extended depth of field. ASTRA™ provides unrivalled reading performance even with very irregular object shapes running at very high speed. The DS8100A also supports ACR™, the Datalogic advanced code reconstruction algorithm, to dramatically increase the total read rate. ACR™ makes a difference when codes are damaged or poorly printed, and has superb external light immunity to keep the system working in several different lighting conditions. And DS8100A includes PackTrack™, by which the localization of code into the reading area is able to finely assign barcodes, reducing the minimum object gap, hence increasing the system throughput.

- **EASY OF SETUP**
  DS8100A supports the parameter setup by the standard Datalogic configuration program Genius™ that helps to automate and speed up the reader configuration and calibration.

- **FLEXIBILITY**
  The new DS8100A is completely compatible with the laser scanner DX8200A, DS6300, DS6400 and the industrial controller SC6000. The high flexibility and modularity is a key feature in composing the best competitive solution for specific requirements.

- **BUILT-IN CONNECTIVITY**
  DS8100A offers the Ethernet connectivity to satisfy contemporary data transmission and remote control.

- **EASY OF MAINTAINANCE**
  A practical display with keyboard increases the DS8100A’s ease of use by offering a simple and complete human interface without the need of a PC. The reader is constantly monitored by internal diagnostic routines; failures and malfunctioning are promptly notified to Host system as well as to Datalogic WebSentinel™, the new remote surveillance software. DS8100A can be simply and quickly replaced thanks to the automatic replacement function, DARP™ that completely manages the restore operations of the system.

- **ENERGY EFFICIENCY**
  DS8100A performs the Energy Saving function that allows saving energy and extending the life of the reader. Upon the occurrence of predefined conditions, scanner will stop motor and switch off laser, waiting for the next activation event.

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**Features**

- ACR™-4 code reconstruction algorithm
- ASTRA™ technology for the electronic focusing system
- PackTrack™ to minimize the gap between objects and increase system productivity
- GENIUS™ multi-language SW for easy scanner configuration/setup
- Built-in Ethernet TCP/IP connectivity
- Remote diagnostic monitoring and control by Datalogic WebSentinel™

**Applications**

- Parcel sorting system
- Dimensioning Weighting Scanning System
- Postal applications
- Automatic baggage handling
- Cargo applications
- Loading/Unloading systems
Specifications

Technical Data

- **Operating Temperature**: 0 to 50 °C (32 to 122 °F)
- **Storage Temperature**: -20 to 70 °C (-4 to 158 °F)
- **Humidity**: 90% non condensing
- **Vibration Resistance**: IEC 68-2-6 test FC 1.5 mm, 10 to 55 Hz; 2 hours on each axis;
  OM: 1.5 mm @ 5 to 9.1 Hz; 0.5 mm @ 9.1 to 150 Hz
- **Shock Resistance**: IEC 68-2-27 test EA 30 G 11 ms; OM: 15 G 11 ms;
  3 shocks on each axis
- **Protection Class**: IP65 (IP64 optional)
- **Light Source**: Visible Laser Diode (630 - 680 nm)
- **Light Receiver**: Avalanche photodiode
- **Max. Resolution Code**: See diagrams
- **Scan Rate**: 1,000 scans per second
- **Max. Depth of Field**: See diagrams
- **Max. Reading Field**: See diagrams
- **Max. Reading Distance**: See diagrams
- **Readable Codes**: 22 symbologies incl. 2/5 family, Code 39, Code 93,
  Code 128, EAN/UPC, Codabar, EAN128
- **Code Autodiscrimination**: Up to 10 different codes
- **Interface Card**: Main interface RS232/RS485 Half Duplex and Full Duplex
  Baud rate 115,200 bauds
  Aux. interface RS232
- **Input Signals**: 3 programmable and 1 Encoder (optocoupled);
  Auxiliary Input (optocoupled) (NPN/PNP transistor)
- **Output Signals**: 3 programmable (NPN/PNP transistor)
- **Setup**: Via serial port commands and Windows™ based software program Genius™
- **Display**: 2 line by 20 character LCD
- **Keypad**: 3 Keys
- **Led Indicators**: 3 LED status indicators: 1) Power on (red) Good Read (red);
  2) Ext.Trigg. (yellow) TX Data (green); 3) Encoder (yellow) Network (red)
- **Laser Classification**: IEC 825 Class 2
- **Laser Control**: Safety system to turn laser off in cases of motor slowdown or failure
- **Power Supply**: 20 to 30 VDC
- **Power Consumption**: 20W-30W max.
- **Dimensions**: 215.5 x 170.5 x 126.5 mm (8.48 x 6.71 x 4.98 in);
  OM: 280 x 254 x 195 mm (11.03 x 10 x 7.68 in)
- **Weight**: 5.0 Kg (176.3 oz.); OM: 6.4 Kg (225.7 oz.)
- **Case Material**: Aluminium

Applications

- **Airport bagagge sorting systems**
- **Automated warehousing identification systems**
- **Postal/Courier parcel sorting and tracking**

Reading Diagrams

High Resolution Models

Standard Resolution Models

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January 2009

For more information and software downloads see: www.automation.datalogic.com/DS8100A