DS2100N
Compact High Performance Laser Scanner

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**General Description**

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**Enhanced Reading Performance**

DS2100N grants high reliability when reading difficult bar codes thanks to its high performance optics and using ACB™ reconstruction technology. DS2400N offers high immunity to ambient light through laser modulation in a very compact and robust housing with IP65 protection.

**New Embedded ID-NET™ High Speed Interface**

DS2100N is equipped with the built-in ID-NET™ interface, used for high-speed scanner interconnection. ID-NET™ allows faster and more efficient data collection without the need for an external multiplexer device. This translates into overall cost reduction and easier system wiring.

**Innovative X-PRESS™ Human Machine Interface**

X-PRESS™ is the intuitive Human Machine Interface designed with the precise goal of improving ease of installation and maintenance. Status and diagnostic information are clearly presented by means of a five LED bar-graph, whereas the single multi-function key gives immediate access to relevant functions such as Test Mode (for bar code verification), AutoLearn (for bar code self-detection) and AutoSetup (for scanner self-adjusting). This makes working easier for any user.

**Multi-language Genius™ SW Configuration Tool**

The DS2100N scanner can be easily programmed through the intuitive and multi-language Genius™ SW tool. Thanks to the wizard approach and graphic add-ons, the scanner configuration will be accomplished rapidly.

**Features**

- Increased read rate on low contrast and dirty bar codes
- Embedded ID-NET™ high speed connectivity to simplify data collection and cluster wiring
- Intuitive X-PRESS™ interface for quick scanner installation and troubleshooting
- Easy setup through multi-language Genius™ SW tool
- ACB™ advanced code builder technology improves the read rate on damaged bar codes
- Motor on/off and motor speed SW programmable for higher reliability
- IP65 rugged industrial housing

**Applications**

- Automated warehousing
  - Conveyor sorting
  - Picking systems
- Automated shopfloor
  - Items and parts tracking
  - Process control and Packaging
- OEM
  - Document Handling
  - Print & Apply
  - Automatic chemical and biomedical analysis machines

www.datalogic.com
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Specifications

**ELECTRICAL CHARACTERISTICS**
- **POWER SUPPLY**: 10 to 30 VDC
- **POWER CONSUMPTION**: 3 W (xxx0 models); 4 W (xxx4 models)

**MECHANICAL CHARACTERISTICS**
- **DIMENSIONS**: 84 x 68 x 34 mm (3.31 x 2.68 x 1.34 in)
- **WEIGHT**: 330 g (11.6 oz)
- **CASE MATERIAL**: Aluminum

**PERFORMANCE**
- **LIGHT SOURCE**: Visible laser diode (630 to 680 nm)
- **SCANNING SPEED**: 500 to 1000 scans/sec (SW programmable)
- **MAX. RESOLUTION**: Up to 0.12 mm (5 mils)
- **MAX. DEPTH OF FIELD**: Up to 260 mm (10.2 in) on 0.50 mm (20 mils) bar codes
- **MECHANICAL APERTURE**: 24 mm (0.95 in) at 500 mm (20 in)
- **MULTILABEL READING**: Up to 10 different symbologies during the same reading phase
- **COMM. INTERFACES**: Main port RS232/RS485 SW selectable up to 115.2 kbps
- **DEVICE PROGRAMMING**: Genius™ SW configuration tool
- **INPUT SIGNAL**: External Trigger (optocoupled, NPN/PNP), IN2 (not optocoupled, NPN only)
- **OUTPUT SIGNALS**: OUT1, OUT2 SW programmable event driven (optocoupled, NPN/PNP)
- **LASER CLASSIFICATION**: IEC 825-1 Class 2; CDRH Class II
- **LASER CONTROL**: Security system to turn laser off in case of motor slow down or failure
- **MOTOR CONTROL**: Motor ON/OFF command string and motor speed SW programmable

**ENVIRONMENT**
- **OPERATING TEMP.**: 0 to 45 °C (32 to 113 °F)
- **STORAGE TEMP.**: -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
- **SHOCK RESISTANCE**: IEC 68-2-27 test EA 30 G; 11 ms; 3 shocks on each axis
- **PROTECTION CLASS**: IP65

**Accessories**

- Mirror solution for limited mounting areas
- Mirror for contact reading applications
- Oscillating mirror for wider reading coverage
- Flexible bracket for fast scanner positioning

Note: DS2100N-xxx0 models@500 scans/s; DS2100N-xxx4 models @1000 scans/s