

# DS2100N

## Compact Laser Scanner

### Highlights

The new DS2100N laser reader takes advantage of Datalogic's successful experience in 1D bar code reading, satisfying the demanding application needs of the largest manufacturers worldwide. DS2100N provides greater profitability and productivity in the most common warehousing, shop floor and OEM applications.

#### • PERFORMANCE

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

#### • ID-NET™

The 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.

#### • X-PRESS™ HMI

X-PRESS™ is the intuitive Human Machine Interface designed to improve 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 Auto-Setup (for scanner self-adjusting). This makes any user's work easier.

#### • GENIUS™

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

- 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 energy saving
- IP65 rugged industrial housing

### Applications

#### Automated warehousing

- Conveyor sorting
- Picking systems

#### Automated shop floor

- Items and parts tracking
- Process control and Packaging

#### OEM

- Document Handling
- Print & Apply
- Automatic chemical and biomedical analysis machines

# DS2100N

## Specifications

## Models

Order n° models	Description
930153183	DS2100N-1200 STD-RES, LINEAR, NSC
930153184	DS2100N-2200 HIGH-RES, LINEAR, NSC
930153185	DS2100N-1210 STD-RES, RASTER, NSC
930153186	DS2100N-2210 HIGH-RES, RASTER, NSC
930153187	DS2100N-1204 STD-RES, LINEAR, HI-PERF, NSC
930153188	DS2100N-1214 STD-RES, RASTER, HI-PERF, NSC
930153189	DS2100N-2204 HIGH-RES, LINEAR, HI-PERF, NSC
930153190	DS2100N-2214 HIGH-RES, RASTER, HI-PERF, NSC

## Accessories

Order n° models	Description
93ACC1839	OM2000N OSCILLATING MIRROR, NSC
93A201108	GFC-200 85° MIRROR CONTACT READING, NSC
93A201000	GFC-2100 90° Reading Mirror

## Technical Data

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
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
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. READING DISTANCE	Up to 310 mm (12.2 in) on 0.50 mm (20 mils) bar codes
MAX. DEPTH OF FIELD	Up to 260 mm (10.2 in) on 0.50 mm (20 mils) bar codes
APERTURE ANGLE	60 degrees
RASTER APERTURE	24 mm (0.95 in) at 500 mm (20 in)
READABLE CODES	Code 2/5, Code 39, Code 93, Code 128, EAN/UPC, EAN 128, Codabar, Pharmacode, ISBN128
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 Aux. port RS232 up to 115.2 kbps ID-NET™ port up to 1 Mbps Genius™ SW configuration tool X-PRESS™ human machine interface Serial host mode programming sequences
OPERATING MODES	'On line', 'Serial On-line', 'Automatic', 'Continuous', 'Test', 'Verify'
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
POWER SUPPLY	10 to 30 VDC
POWER CONSUMPTION	3 W (xxx0 models); 4 W (xxx4 models)

## Accessories



GFC-2100 90° Mirror Solution

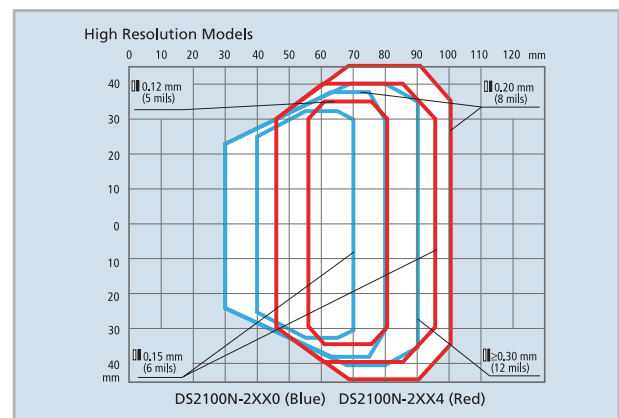
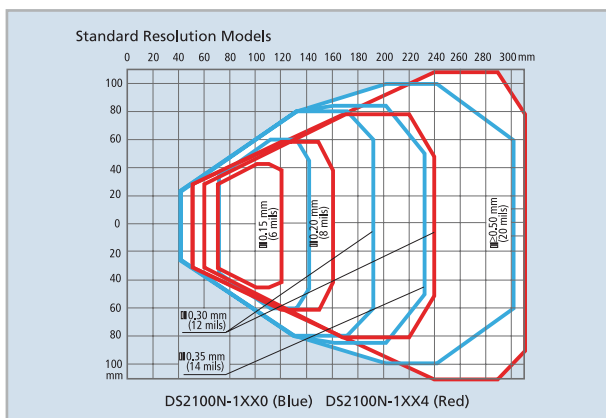


GFC-200 Contact Reading Mirror



OM2000 Oscillating Mirror

## Reading Diagrams



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For more information and software downloads see: [www.automation.datalogic.com/DS2100N](http://www.automation.datalogic.com/DS2100N)

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