

DS2400A

Compact Extended Range Laser Scanner

**1000
scans/sec**

ACB™

Advanced Code Builder

600 mm

Reading Distance

**Short,
Medium and
Long Range
Models**



General Description

Datalogic's DS2400A grants improved productivity, greater profitability and more efficient processing in the most common warehousing, shop floor and OEM applications, providing a competitive advantage to any company.

The DS2400A combines long distance reading, high scanning speed and very compact dimensions with the new ACB™ Advanced Code Builder, the new Datalogic proprietary software able to decode partially damaged or normally unreadable bar codes due to high tilt angles.

The user can select the most suitable scanning speed (600 to 1000 scans) according to the bar code density (standard/high) and real reading conditions (standard/difficult) of the particular application. This capability of creating a "tailor made" configuration enhances system performance, lowers the need and cost of manual bar code reading, improves the speed and quality of collected data and makes the information scanned extremely reliable.

In addition, the scanner motor can be switched OFF and ON via software commands when the scanner is not in use, drastically increasing the product life.

The DS2400A is characterized by its extreme depth of field. Three different optics (short-medium-long range) are available to select the required reading distance.

Thanks to its unique characteristics, including wide reading range, high scanning and communication speed, as well as compactness in both direct or 90° reading, the DS2400A represents the best solution for improved business performance.

Features

- > **ACB™ Advanced Code Builder**
- > Software programmable scanning speed up to 1000 scan/s
- > Reading distance up to 600 mm
- > Software motor ON/OFF command
- > Short, Medium and Long range models
- > Selectable RS232/RS485 main serial port, RS232 auxiliary port
- > Easy set-up through WINHOST™
- > Same compact dimensions for direct or 90° reading
- > IP65 rugged industrial housing

Applications

- > Automated warehousing
 - Conveyor sorting
 - Label verification
 - Picking systems
- > Automated shopfloor
 - Items and parts tracking
 - Packaging and compliance
- > OEM
 - Automatic chemical and biomedical analysis machines

Specifications

ELECTRICAL CHARACTERISTICS

POWER SUPPLY 10 to 30 VDC
 POWER CONSUMPTION 5 W

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

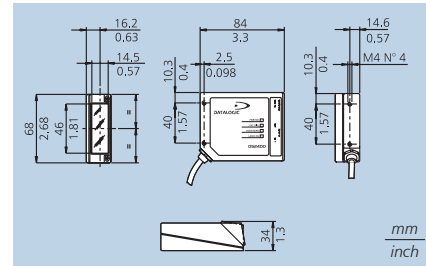
PERFORMANCE

LIGHT SOURCE Visible laser diode (630 to 680 nm)
 SCANNING SPEED 600 to 1000 scans/sec (SW programmable)
 MAX. RESOLUTION Short range 0.20 mm (8 mils)
 Medium range 0.25 mm (10 mils)
 Long range 0.35 mm (14 mils)
 MAX. READING DISTANCE On 0.50 mm (20 mils) code resolution
 Short range 360 mm (14.2 in)
 Medium range 440 mm (17.3 in)
 Long range 600 mm (23.6 in)
 MAX. DEPTH OF FIELD On 0.50 mm (20 mils) code resolution
 Short range 300 mm (11.8 in)
 Medium range 340 mm (13.4 in)
 Long range 400 mm (15.7 in)
 APERTURE ANGLE 50 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, Plessey, Pharmacode
 MULTILABEL READING Up to 6 different codes in the same reading phase
 COMM. INTERFACES Main port Selectable RS232 or RS485
 Auxiliary port RS232
 BAUD RATE Up to 115,200 baud (both interfaces)
 INPUT SIGNAL External Trigger digital input (optocoupled NPN/PNP transistor)
 OUTPUT SIGNALS Two programmable digital outputs (optocoupled NPN transistors)
 PROGRAMMING METHOD Via serial port (WINHOST™)
 OPERATING MODES 'On line', 'Serial On-line', 'Automatic', 'Test', 'Verifier'
 LED INDICATORS 'Power On/Tx Data', 'External Trigger', 'Good Read', 'Laser On'
 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 SW command

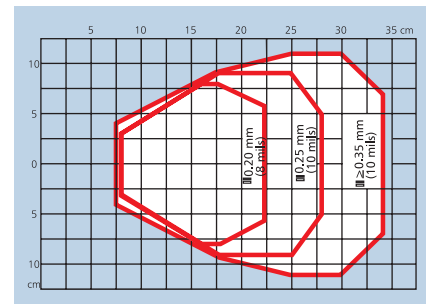
ENVIRONMENT

OPERATING TEMP. 0 to 40 °C (32 to 104 °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

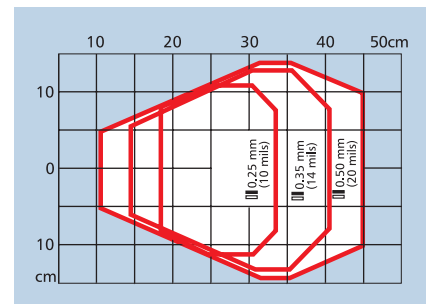
Dimensions



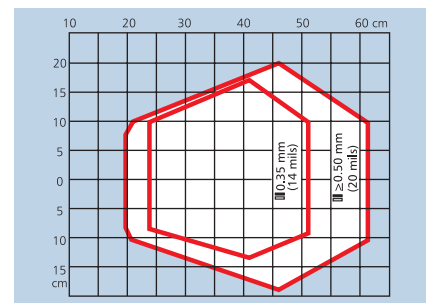
Reading Diagrams



DS2400 Short Range Model



DS2400 Medium Range Model



DS2400 Long Range Model



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