DS4600A

ACR Version

High Performance Compact Laser Scanner













Unattended Scanning Systems

General Description

The new Datalogic **DS4600A-3XXX** is an industrial fixed positioned bar code reader designed for the manufacturing industry.

The **DS4600A-3XXX** features an ACR™ (Advanced Code Reconstruction) decoder. ACR™ technology based on a powerful DSP which performs real time bar code image reconstruction and decoding, enabling non-oriented labels placed in various positions on objects to be read. The great benefit provided by ACR™ technology on the **DS4600A-3XXX** is that the barcode positioning tolerance is increased and it is easier to position the scanner.

As a result of new optics, based on a diffractive lens, and an improved focusing system, the DS4600A-3XXX provides great reading performance in challenging situations in which thermal transfer or low contrast barcodes are used. One of the scanner versions with a new optic platform makes it possible to read high resolution barcodes (0.2mm/8 mils).

The new Datalogic **DS4600A-3XXX** is available in three versions: the high resolution model (DS4600A-3200), the medium range model (DS4600A-3000) and the long range version (DS4600A-3100).

The reading characteristics, ease of use and flexibility of the **DS4600A-3XXX** make this scanner suitable for a wide range of applications in the manufacturing industry, including automated warehousing, shop floor, data collection and WIP tracking, providing ideal benefits for the customer.

With the DS4600A-3XXX state-of-the-art technology, Datalogic strengthens its leadership in the design, manufacture and distribution of bar code reading systems.

Features

- > Reading distance up to 1,000 mm
- > ACR[™] code reconstruction
- > Real time decoding with new DSP
- > Good reading performances on very low contrast bar codes
- > Oscillating mirror available
- > Two software programmable outputs
- > WinHost™ programming

Applications

- > Automated warehousing
 - Conveyor sorting
 - Label verification
 - Picking systems
- > Automated shop floor
 - Items and parts tracking
 - Packaging
 - Compliance

Specifications

ELECTRICAL CHARACTERISTICS

POWER SUPPLY 10 to 30 Vdc POWER CONSUMPTION 6 W max.

MECHANICAL CHARACTERISTICS

101 x 83.5 x 42 mm (3.98 x 3.29 x 1.65 in.) **DIMENSIONS**

WEIGHT 615 g (21.7 oz.) approx.

CASE MATERIAL Cast aluminium

PERFORMANCE

LIGHT SOURCE Visible Laser Diode (658 nm)

MAX. RESOLUTION 0.2 mm (8 mils) SCAN RATE 800 scan/s MAX. READING DISTANCE see diagrams MAX. DEPTH OF FIELD see diagrams MAX. READING FIELD see diagrams

READABLE CODES Most popular standards incl. 2/5 family, Code 39, Code 93,

Code 128, EAN/UPC, EAN 128

MULTILABEL READING Up to 6 different codes in the same presence sensor phase SERIAL INTERFACES One RS232, one SW programmable RS232 / RS485 Multidrop

BAUD RATE Up to 115.2 Kbauds (both serial interfaces)

INPUT SIGNAL 'Presence sensor' plus 2 programmable inputs (Optocoupled

NPN/PNP transistor)

OUTPUT SIGNALS 2 fully programmable digital outputs (Optocoupled NPN

transistor open collector and emitter)

PROGRAMMING METHOD Through a serial interface (Winhost™ configuration program)

OPERATING MODES 'On line', 'Serial On line', 'Automatic', 'Test'

'Ready', 'Reading phase active', 'Good read', 'Data transmit' LED INDICATORS

LASER CLASSIFICATION IEC 825 Class 2

LASER CONTROL Security system to turn laser Off in case of motor slow down or

failure

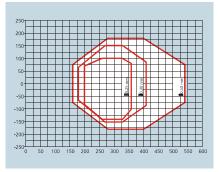
ENVIRONMENT

OPERATING TEMPERATURE 0 to 40 °C (32 to 104 °F) STORAGE TEMPERATURE -20 to 70 °C (-4 to 158 °F) **HUMIDITY** 90% non condensing

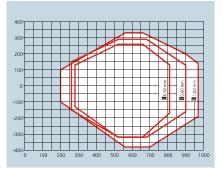
VIBRATION RESISTANCE IEC 68-2-6 test FC 1.5 mm; 10 to 55 Hz; 2 hours on each axis SHOCK RESISTANCE IEC 68-2-27 test EA 30 G; 11 ms; 3 shocks on each axis

PROTECTION CLASS IP65

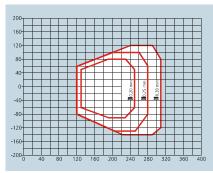
Reading Diagrams



Medium Range model (DS4600A-3000)



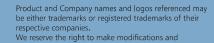
Long Range model (DS4600A-3100)



High Resolution model (DS4600A-3200)













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