DS4600A
ACR Version

High Performance Compact Laser Scanner

ACR
BEST PERFORMANCE ON TILTED OR DAMAGED BARCODES
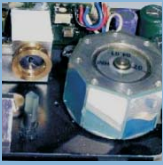
General Description

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

DATALOGIC

Specifications

ELECTRICAL CHARACTERISTICS

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

MECHANICAL CHARACTERISTICS

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DIMENSIONS	101 x 83.5 x 42 mm (3.98 x 3.29 x 1.65 in.)
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'
LED INDICATORS	'Ready', 'Reading phase active', 'Good read', 'Data transmit'
LASER CLASSIFICATION	IEC 825 Class 2
LASER CONTROL	Security system to turn laser Off in case of motor slow down or failure

ENVIRONMENT

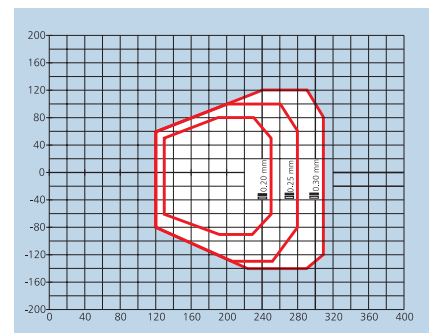|	
OPERATING TEMPERATURE	0 to 40 °C (32 to 104 °F)
STORAGE TEMPERATURE	-20 to 70 °C (-4 to 158 °F)
HUMIDITY	90% non condensing
VIBRATION RESISTANCE	IEC 68-2-6 test FC 1.5 mm; 10 to 55 Hz; 2 hours on each axis
SHOCK RESISTANCE	IEC 68-2-27 test EA 30 G; 11 ms; 3 shocks on each axis
PROTECTION CLASS	IP65

Reading Diagrams
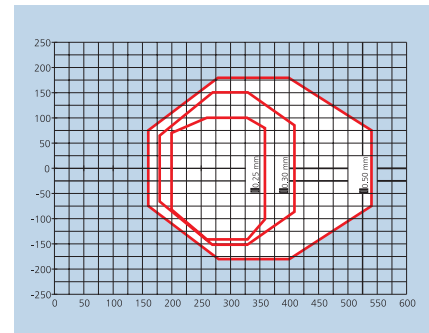
Medium Range model (DS4600A-3000)
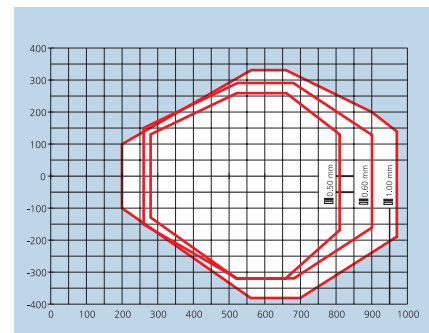
Long Range model (DS4600A-3100)

High Resolution model (DS4600A-3200)