

DS6400

High Performance Laser Scanner



Unattended Scanning Systems

General Description

The DS6400 has been specifically designed to satisfy the needs of various AutoID applications in Manufacturing and Logistics applications.

The DS6400 is based on the same concept of the DS6300 and DS6500: a complete and modular solution in terms of reading performance, connectivity, ease of use and maintenance.

Modularity and flexibility of the DS6400 is based on an innovative mechanical design with the scanner separated in two parts: the reading head and decoder base. As a result, it is possible to always install the scanner in the ideal position, by simply rotating the Head / Base position ("Step-A-Head").

The DS6400 has a built-in linear motor providing a dynamic focus system called FLASH™, fully controlled via SW, which covers an impressive reading range of over 2 meters. FLASH™ is capable of moving the focus position from the minimum to the maximum position, in less than 10 msec. FLASH™ complements ASTRA™ technology, based on a multi-laser architecture, which maximizes the real time depth of field.

The DS6400 is offered both in linear and integrated Oscillating Mirror (OM) versions, which are fully SW controlled.

The DS6400 has the same decoder base as the DS6300, with built-in connectivity to Ethernet, Devicenet and Profibus.

With the GENIUS™ program, it's easy to setup the scanner and to perform functions such as remote control and SW updates on any slave scanner of the cluster by simply connecting the Master.

Features

- > "FLASH™" dynamic focus system
- > Totally SW controlled
- > Reading range from 300 to 2500 mm
- > Advanced decoder with code reconstruction capability (ACR™ 4)
- > Linear and integrated Oscillating Mirror versions
- > Display and keyboard
- > GENIUS™ SW configurator
- > Built-in connectivity to Ethernet / Devicenet / Profibus
- > PackTrack™ function

Applications

- > Shop Floor, WIP tracking in Manufacturing, Automotive, Electronics, Consumer Products
- > Reading on pallets in Warehousing and Distribution
- > Tracking and sorting of goods
- > Vehicle mounted applications (forklift trucks)

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Specifications

ELECTRICAL CHARACTERISTICS

POWER SUPPLY 15 to 30 Vdc
POWER CONSUMPTION 15 W max.

MECHANICAL CHARACTERISTICS

DIMENSIONS 113 x 110 x 99 mm (4.45 x 4.33 x 3.90 in.);

Integrated OM version: 180 x 113 x 99 mm (7.09 x 4.45 x 3.90 in.)
Linear version: 1.4 kg. (3 lb); Integrated OM version: 2 kg. (4 lb 8 oz)
Aluminium

WEIGHT

CASE MATERIAL

PERFORMANCE

LIGHT SOURCE Visible Laser Diode (650 nm)
MAX. RESOLUTION 0.2 mm (8 mils)
SCAN RATE 600 to 1,200 scan/s (SW adjustable)

MAX. READING DISTANCE See diagrams
MAX. DEPTH OF FIELD See diagrams

MAX. READING FIELD See diagrams
READABLE CODES All the most used symbologies

MULTILABEL READING Up to 10 different codes in the same reading phase
MAIN INTERFACE RS232 / RS485 (20 mA C.L. optional)

AUXILIARY INTERFACE RS232 / RS485 (20 mA C.L. optional)
OTHER AVAILABLE INTERFACES Lonworks (Master/Slave), Ethernet, Devicenet, Profibus

BAUD RATE 1,200 to 115,200 bauds
INPUT SIGNAL 'Presence sensor' plus 3 auxiliary digital inputs

OUTPUT SIGNALS 3 SW programmable digital outputs
OPERATING MODES 'On line', 'Serial On line', 'Continuous', 'Test', 'PackTrack'

LED INDICATORS 'Ready', 'Reading phase active', 'Label present', 'Data transmit'
DISPLAY 2 lines by 16 characters LCD

KEYPAD 3 keys
LED INDICATORS 'Power ON', 'Phase ON', 'TX data'

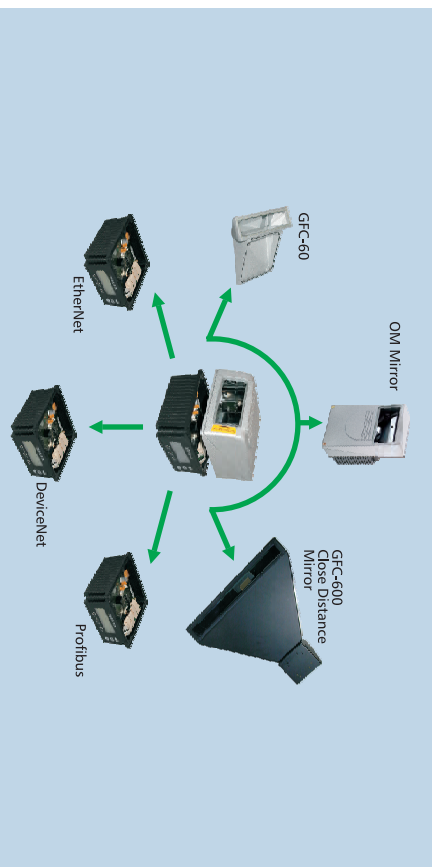
LASER CLASSIFICATION IEC 825 Class 2
LASER CONTROL Security system to turn laser OFF in case of motor slow down

ENVIRONMENT

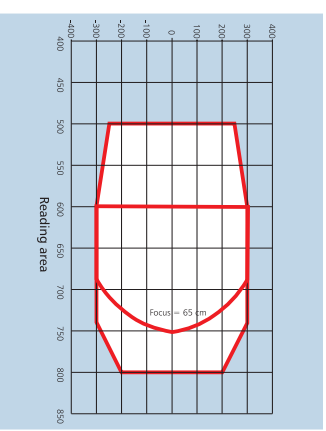
OPERATING TEMPERATURE 0 to 40 °C (32 to 104 °F),
STORAGE TEMPERATURE -20 to 70 °C (-4 to 158 °F)

PROTECTION CLASS IP64 for standard models; IP65 on request

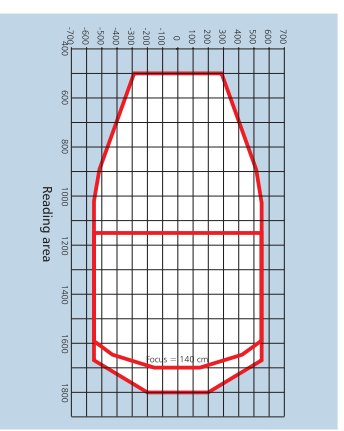
Modular Concept



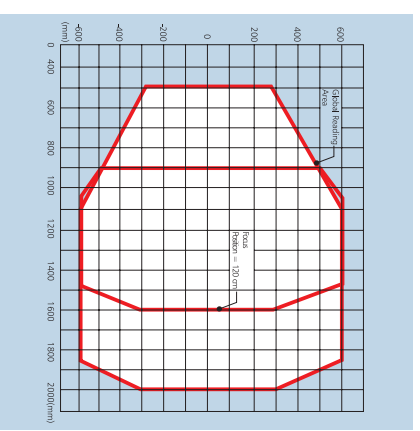
Reading Diagrams



0.2 mm (8 mils) resolution codes



0.375 mm (15 mils) resolution codes



0.5 mm (20 mils) resolution codes

