DS1500

High Performance Miniature Laser Scanner

DATALOGIC









Unattended Scanning Systems

General Description

The combination of extremely compact dimensions and powerful high speed reading capabilities makes the DS1500 scanner ideal for demanding OEM applications.

In fact, DS1500 miniaturization allows easy integration into OEM equipment and automatic machinery. The high scan rate and sophisticated electronic design effectively addresses difficult reading conditions.

Availability of embedded ACB™ (Advanced Code Builder) reconstruction SW algorithm allows consistent decoding of damaged or mis-applied labels (resulting in high tilt angles).

DS1500 installation and configuration is easy and simple thanks to compact size and to the new test operating mode with bar-graph. Test mode is activated by means of a pushbutton on the scanner (external PC not required) and the led bar-graph shows the real time read percentage. This feature increases the scanner ease of installation and re-positioning during product changeovers in automated machinery.

DS1500 operates at a speed up to 1200scan/s, extending the application range also to high speed document handling, paper inserting, label rewinding and packaging machines.

Additionally, the scanner motor can be switched ON and OFF via SW command. This feature is useful in very low throughput application or when the machine sits idle for long periods. A simple software command allows a prompt restoration of full operation when needed.

DS1500, the best answer for reduced space and high performance integration bar code reading needs!

Features

- Extremely compact dimensions (40 x 30 x 22mm)
- Up to 1200 scan/s
- ACB™ (Advanced Code Builder) reconstruction
- Ease of use - Test mode with bar-graph
- Motor ON/OFF SW control
- Selectable RS232/485 serial link
- IP65 rugged industrial housing

Applications

- OEM integration
- Chemical and biomedical analysis machines
- Document handling
- Print & Apply systems
- Packaging machines
- ATL (Automated Tape Library)

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Specifications

ELECTRICAL CHARACTERISTICS

POWER SUPPLY	5 Vdc
POWER CONSUMPTION	2 W max.

MECHANICAL CHARACTERISTICS

DIMENSIONS	40 x 30 x 22 mm (1.6 x 1.2 x 0.9 in)
WEIGHT	44 g (1.55 oz) without cable
CASE MATERIAL	ZAMA (zinc, aluminum, magnesium alloy)

PERFORMANCE

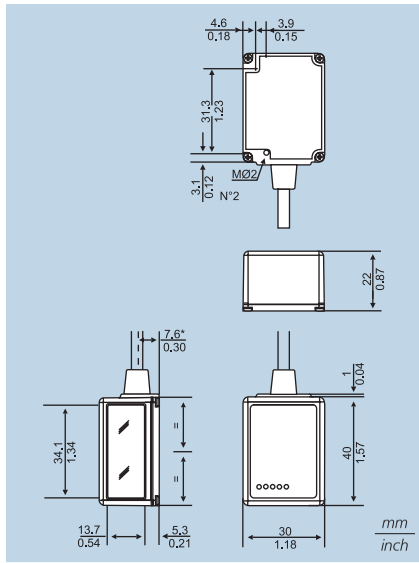
LIGHT SOURCE	Visible laser diode (658 nm)
MAX. RESOLUTION	0.15 mm (6 mils)
SCANNING SPEED	1200 scans/s or 800 scan/s (SW selectable)
MAX. READING DISTANCE	240 mm / 9.45 in (on codes with 0.50 mm/20 mils resolution)
MAX. DEPTH OF FIELD	200 mm / 7.87 in (on codes with 0.50 mm/20 mils resolution)
APERTURE ANGLE	60°
READABLE CODES	All main linear bar code symbologies
MULTILABEL READING	Up to 6 different codes readable in the same phase
RECONSTRUCTION SOFTWARE	ACB™ (Advanced Code Builder) embedded
USER INTERFACE	Pushbutton, 5 LEDs (scanner status/performance monitor)
LED INDICATORS	'Power on/100%', 'Good Read/80%', 'Ext. Trig./60%', 'TX Data/40%', 'Laser On/20%'
INPUT/OUTPUT SIGNALS	1 digital Input + 2 programmable digital outputs
PROGRAMMING METHOD	Via serial port (Winhost™)
OPERATING MODES	On Line, Serial On Line, Automatic, Continuous, Test
CONNECTIVITY	2 x RS232 or 1 x RS485 (full or half duplex) SW selectable
BAUD RATE	Up to 115.2 KBaud
LASER CLASSIFICATION	Class 2 - EN 60825-1, Class II - CDRH
LASER CONTROL	Laser auto shut-off in case of motor failure
MOTOR CONTROL	On/Off via SW command

ENVIRONMENT

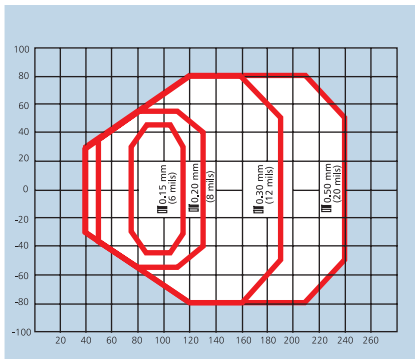
OPERATING TEMPERATURE	0 to 45°C (32 to 113 °F)
STORAGE TEMPERATURE	-20 to 70 °C (-4 to 158 °F)
HUMIDITY	90% non condensing
VIBRATION RESISTANCE	IEC 68-2-6 test FC 1.5 mm; 10 to 55 Hz; 2 hours on each axis
SHOCK RESISTANCE	IEC 68-2-27 test EA 30 G; 11 ms; 3 shocks on each axis
PROTECTION CLASS	IP65



Dimensions



Reading Diagram



Standard Resolution Model

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