

# DS1500

## High Performance Miniature Laser Scanner



Compact Dimensions



1200 scan/s



Test Mode with Bar-graph



44 g (1.55 oz)  
Lightweight



1200 scan/s!

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)

# DS1500

High Performance  
Miniature Laser Scanner

## Specifications

## Dimensions

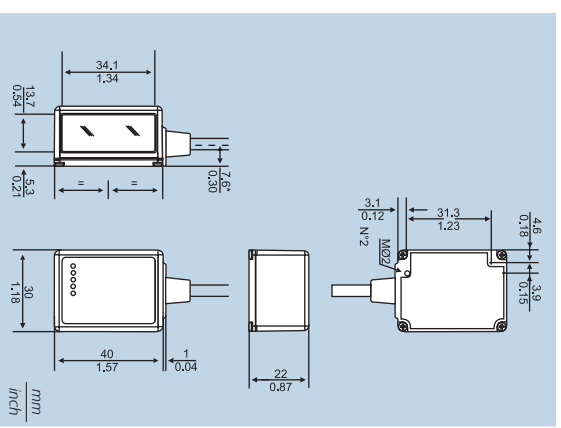
**ELECTRICAL CHARACTERISTICS**  
**POWER SUPPLY** 5 Vdc  
**POWER CONSUMPTION** 2 W max.

**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** ZAM/A (zinc, aluminum, magnesium alloy)

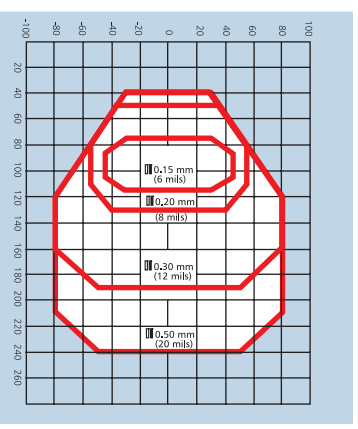
**PERFORMANCE**  
**LIGHT SOURCE** Visible laser diode (658 nm)  
**MAX. RESOLUTION** 0.15 mm (6 mils)  
**SCANNING SPEED** 1200 scans/s or 800 scan/s (SW selectable)  
**MAX. READING DISTANCE** 240 mm / 9.45 in (on codes with 0.50 mm/20 mils resolution)  
**MAX. DEPTH OF FIELD** 200 mm / 7.87 in (on 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



## Reading Diagram



Standard Resolution Model

