

# DX8200A

## Top Performance Omni-directional Laser Scanner

**DATALOGIC**  
Your Life. Our Enthusiasm™



Unattended Scanning Systems

## General Description

The new DX8200A is a top performance omni-directional laser bar code scanner, purposely designed to satisfy the needs of sorting applications for the Transportation & Logistics market. Datalogic used its experience with the DX8200 to develop the DX8200A, making it a more compact, increased performance omni-directional scanner. It is based on the innovative 3-diode structure, that offers an unbeatable real time Depth Of Field. As a result of improved ASTRA™ technology that increases its already impressive performance, 3 laser diodes are electronically switched from one to the other, depending on the bar code distance from the scanner. This means that the scanner is able to capture the bar code on an object of any possible shape, in any position, as the DX8200A focuses on the bar code and not on the object profile. Advanced ASTRA™ technology, moreover, permits the PackTrack™ function, that reduces the min. object gap and increases the system throughput, to be fully exploited. The SW platform of the new DX8200A, based on the GENIUS™ program, permits 100% control of scanner behavior via SW: the new DIGITECH™ signal processing technology permits all the scanner parameters to be configured via GENIUS™. As a result, scanner customization is made by simply downloading the right SW recipe into the scanner.

The new DX8200A is completely compatible with the DS8100A, the 6000 scanner family (DS6300, DS6400, DS6500) and the SC6000 industrial controller making Datalogic's offer more flexible and scalable, with numerous possibilities and solutions. Connectivity has been improved with the introduction of built-in Ethernet connectivity with implemented TCP-IP, Ethernet/IP, Modbus TCP and Profinet protocols. Moreover, the new DX8200A offers built-in connectivity to Profibus and DeviceNet.

A practical display with keyboard increases the DX8200A's ease of use by offering a simple and complete human interface without the need of a PC. The new ASR™ function permits completely automatic slave scanner replacement.

## Features

- > Omni-directional reading
- > ACR™-4 code reconstruction algorithm
- > ASTRA™ technology for the electronic focusing system
- > Digitech™ signal processing technology
- > PACKTRACK™ to minimize the gap between objects and increase system productivity
- > GENIUS™ multi-language SW for easy scanner configuration/setup
- > Display and keyboard
- > Built-in Ethernet TCP/IP connectivity on some versions

## Applications

- > Postal/Courier parcel sorting and tracking
- > Automated warehousing identification systems
- > Airport baggage sorting systems

### Specifications

#### ELECTRICAL CHARACTERISTICS

POWER SUPPLY 20 to 30 Vdc, or 85 to 264 Vac, 50 to 60 Hz, 30 VA depending on model used  
 POWER CONSUMPTION 30 W

#### MECHANICAL CHARACTERISTICS

DIMENSIONS 470 x 300 x 147 mm (18.5 x 11.8 x 5.78 in)  
 WEIGHT 11 Kg (24.5 lbs)  
 CASE MATERIAL Steel

#### PERFORMANCE

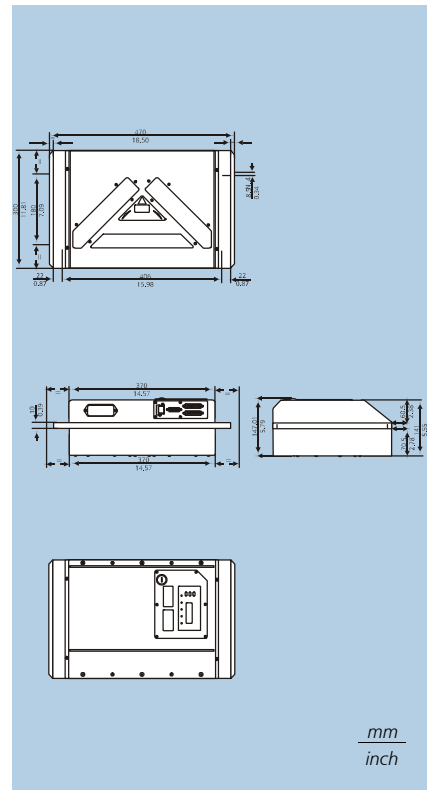
LIGHT SOURCE Visible Laser Diode (650 nm)  
 LIGHT RECEIVER Avalanche photodiode  
 SCAN RATE 1000 scans/sec (500 scans per line)  
 READING PATTERN Single-cross  
 READABLE CODES The most common symbologies incl. 2/5 family, Code 39, Code 128, EAN/UPC, EAN 128  
 CODE AUTODISCRIMINATION Up to 10 different codes  
 AVAILABLE INTERFACE Main interface RS232/RS485/Half Duplex and Full Duplex;  
 Baud rate 115,200 bauds;  
 Aux. interface RS232

INPUT SIGNALS LONWORKS Net with Master/Slave (Baud rate: 1,250 Mbauds)  
 OUTPUT SIGNALS 3 programmable and 1 'Encoder' (NPN/PNP transistor)  
 SETUP 3 programmable (NPN/PNP transistor)  
 OPERATING MODES (Serial) Via serial port commands and Windows based software program Genius™  
 'On line', 'Serial on line', 'Automatic', 'Continuous', 'PackTrack', 'Test'  
 DISPLAY 2 line by 20 character LCD  
 KEYPAD 3 keys  
 LED INDICATORS 6 LED status 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 50 °C (32 to 122 °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 @ 5 to 8.9 Hz; 0.5 G @ 8.9 to 150 Hz; 2 hours on each axis  
 SHOCK RESISTANCE IEC 68-2-27 test EA 15 G, 11 ms; 3 shocks on each axis  
 PROTECTION CLASS IP64 (IP65 optional)

### Dimensions



### Standard Reading Conditions

The parameters shown in the following table must be taken into consideration to determine the reading conditions of an omni-directional application. The table shows the minimum allowable code height for given conditions of conveyor speed and code resolution. The data provided is for reference code symbologies (Code 128).

MINIMUM CODE HEIGHT FOR OMNI-DIRECTIONAL READING (mm)						
CONVEYOR SPEED (m/s)	0.5	1	1.5	2	2.5	3
0.25	8	10	12	14	16	18
<b>CODE 128</b>	0.30	9	11	13	15	19
<b>CODE RESOLUTION (mm)</b>	0.33	9	11	13	15	20
	0.38	10	12	14	16	20
	0.50	12	14	16	18	22
	0.72	16	18	19	21	26
	1.00	22	23	24	26	30

For operating parameters outside the reference conditions and to fully exploit the DX8200A performance and capabilities, Datalogic recommends contacting the local technical support department for a complete evaluation of specific needs and reading conditions.