

DX8200A

Performance Laser Scanner

Highlights

The new DX8200A is a high-performance X-pattern laser scanner capable of omnidirectional barcode reading that provides an economical and easily installed single scanner solution for Transportation and Logistics needs. The X-pattern design allows a single DX8200A to do the work of two DS8100A's for many applications. Setup is thus quicker; and simpler thanks to the pre-calibration built into the DX8200A. A built-in DC power supply means the unit can be powered up with a standard AC power cord. Connectivity to the most popular networks is assured with Profibus and Devicenet available in addition to Ethernet communications.

• EXCELLENT READING PERFORMANCE

The Datalogic DX8200A is based on ASTRA™, an innovative and patented multiple-diode switching technology that guarantees excellent reading performance through the use of real-time focusing on an extended depth of field. ASTRA™ provides unrivalled reading performance even with very irregular object shapes running at very high speed. The DX8200A also supports ACR™, the Datalogic advanced code reconstruction algorithm, to dramatically increase the total read rate. ACR™ makes a difference when codes are damaged or poorly printed, and has superb external light immunity to keep the system working in several different lighting conditions. And localization of code into the reading area makes the PackTrack™ feature able to finely assign barcodes, reducing the minimum object gap, hence increasing the system throughput.

• EASY SETUP

DX8200A supports parameter setup by the standard Datalogic configuration program, Genius™, that helps to automate and speed up the reader configuration and calibration.

• FLEXIBILITY

The new DX8200A is completely compatible with the laser scanner models DS8100A, DS6300, DS6400 and with the industrial controller SC6000. This high flexibility and modularity is a key feature when configuring the most competitive solution for a variety of requirements.

• BUILT-IN CONNECTIVITY

DX8200A offers several external interfaces to meet all the most common interconnection requirement. Ethernet, Profibus and Devicenet interfaces are directly available on the reader without the use of additional components.

• EASY OF MAINTAINANCE

A built-in display and keyboard increases the DX8200A's ease of use by offering a simple and complete human interface without the need of a PC. The reader is constantly monitored by internal diagnostic routines; failure and malfunction messages are promptly sent to the Host system and also to Datalogic WebSentinel™, the new remote surveillance application software. The DX8200A can be simply and quickly replaced for service thanks to DARP™, the automatic replacement function, that completely restores operations of the system into the replacement unit.

• ENERGY EFFICIENCY

The DX8200A features an Energy Saving function that reduces energy use and extends the life of the reader. Energy can be saved whenever predefined conditions are met: the motor will stop and the laser will switch off, waiting for the next activation event to power on again.

Features

- Omni-directional reading
- ACR™-4 code reconstruction algorithm
- ASTRA™ technology for the electronic focusing system
- PACKTRACK™ to minimize the gap required between objects and increase system productivity
- GENIUS™ multi-language SW for easy scanner configuration/setup
- Built-in Ethernet TCP/IP, Profibus, and Devicenet connectivity
- Remote diagnostic monitoring and control by Datalogic WebSentinel™
- Display and keyboard Applications

Applications

- Parcel sorting system
- Dimensioning Weighting Scanning System
- Postal applications
- Automatic baggage handling
- Cargo applications
- Loading/Unloading systems



DATALOGIC™

DX8200A

Specifications

Technical Data

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
Dimensions	470x300x147 mm (18.5x11.8x5.78 in)
Weight	11 Kg (24.5 lbs)
Case Material	Steel
Light Source	Visible Laser Diode (650 nm)
Light Receiver	Avalanche photodiode
Scan Rate	1000 scans/sec (500 scans per line)
Readable 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
Lonworks	Net with Master/Slave (Baud rate: 1,250 Mbauds)
Input Signals	3 programmable and 1 'Encoder' (NPN/PNP transistor)
Output Signals	3 programmable (NPN/PNP transistor)
Setup	Via serial port commands and Windows based software program Genius™
Operating Modes (Serial)	'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
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)

Applications



Airport baggage sorting systems



Parcel Sorting Systems

Standard Reading Conditions

The parameters shown in the following table must be taken into consideration to determine the reading conditions of an omnidirectional 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).

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.

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
CODE 128	0.30	9	11	13	15	17	19
CODE RESOLUTION (mm)	0.33	9	11	13	15	18	20
	0.38	10	12	14	16	18	20
	0.50	12	14	16	18	20	22
	0.72	16	18	19	21	24	26
	1.00	22	23	24	26	28	30

Product and Company names and logos referenced may be either trademarks or registered trademarks of their respective companies. We reserve the right to make modifications and improvements.

January 2009



DATALOGIC™

DATALOGIC AUTOMATION