



# DX8200

## *Omni-directional Laser Scanner*

### FEATURES

- **Best price/performance ratio on the market**
- **Easy to install, set and operate**
- **1000 scan/s (500 scan/s for each scan line)**
- **Ambient light immunity**
- **ASTRA™** multi laser technology for large DOF with no need for autofocus
- **ACR™** Advanced Code Reconstruction Decoder
- **PackTrack™** parcel tracking system
- Optimal reading of plastic coated labels
- Extended power supply range (85 to 264 Vac)

### APPLICATIONS

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

### GENERAL DESCRIPTION

**DX8200** omni-directional laser reader joins Datalogic's state of the art technologies for bar code scanning and a real plug and play approach to omni-directional reading for unbeatable price/performance ratio. The same technologies featured by the DS8100 - performance leader in this application segment - are employed in the new **DX8200**, making it a powerful solution for omni-directional bar code reading.

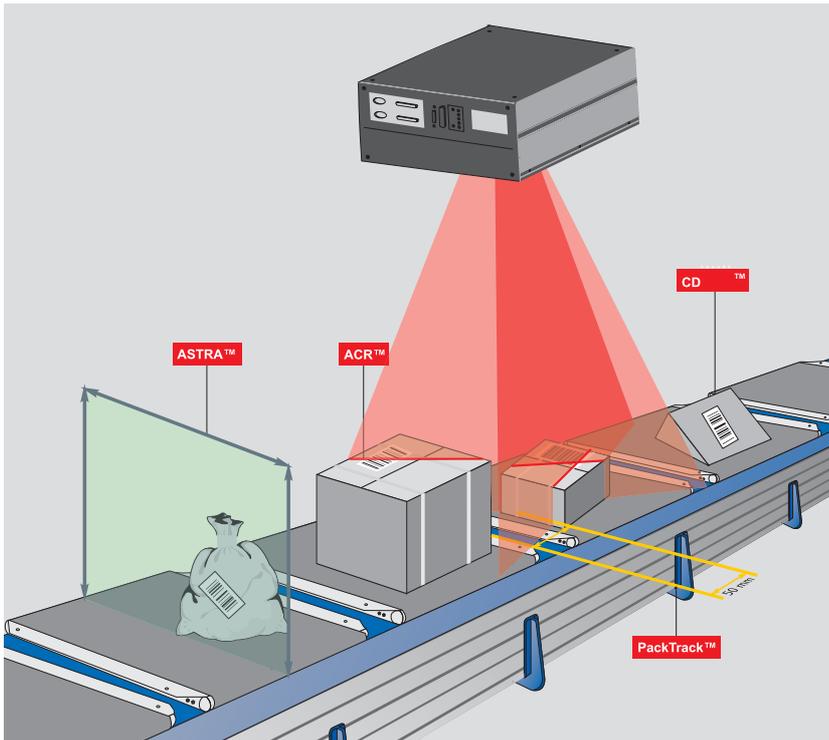
The **DX8200** is Datalogic's answer to the growing need for affordable standard equipment requiring minimum support for installation and setting. **DX8200** omni-directional reading capability is supported by **ACR™** technology for maximum reading performance and reliability as well as patented **ASTRA™** technology which avoids use of external sensors and mechanical focusing systems to extend the system depth of field with the maximum level of reliability. The **Packtrack™** also allows maximum conveyor throughput assuring 100% tracking with a minimum gap between parcels of just 50mm, with no need for external sensors and no requirement for complex system calibration. The universal power supply range (85-260 Vac) of the **DX8200** serial interface version cuts installation and integration costs.

Datalogic's solutions for Materials Handling include systems based on different approaches: DS8100 multiple reading heads solution for extreme performance and maximum flexibility and **DX8200** integrated solution for a cost effective approach to more standardized applications. Combined configurations based on both approaches can be accomplished to provide the best solution for specific reading needs thanks to 100% compatibility among the members of the 8000 Series.

The industrial design and extensive use of proved technologies make the new **DX8200** an extremely reliable reader able to assure the best performance in the most demanding conditions and strengthen Datalogic's position as a world leader in the design and manufacturing of omni-directional bar code reading solutions.

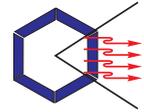


## TECHNOLOGIES



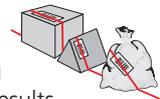
 Second generation ACR™ technology allows high performance omni-directional reading of low aspect ratio, poorly printed and damaged codes.

ASTRA™ multi-laser technology allows a large depth of field with no mechanical autofocus and no external sensors.



 CDSQUARE™ technology allows automatic detection of bar code label position in real time on the object being scanned.

PackTrack™ exploits CDSQUARE™ to track objects and labels along the reading area, with results of 100% accuracy on parcel tracking with a 50 mm minimum gap between objects.



## APPLICATIONS



The DX8200 optical architecture allows fast installation for a real plug and play approach to omni-directional reading applications. Installation on the top and side of the conveyor is easily accomplished to provide the highest reading performance in multi-side applications. The DX8200 with serial interface is ideal for stand-alone applications and for multi-scanner configurations through master/slave connection. It can be easily programmed through the standard WINHOST™ interface for the fastest system parameter setting, including the PackTrack™ tracking system.

Datalogic original bus architecture allows a simple communication architecture through the SC8000 omni-station controller when many scanners must be connected in multi-side reading systems. The DX8200 is 100 % compatible with the 8000 series architecture: DX8200, DS8100 and VS8000 can be interconnected in the reading system with the highest level of flexibility.

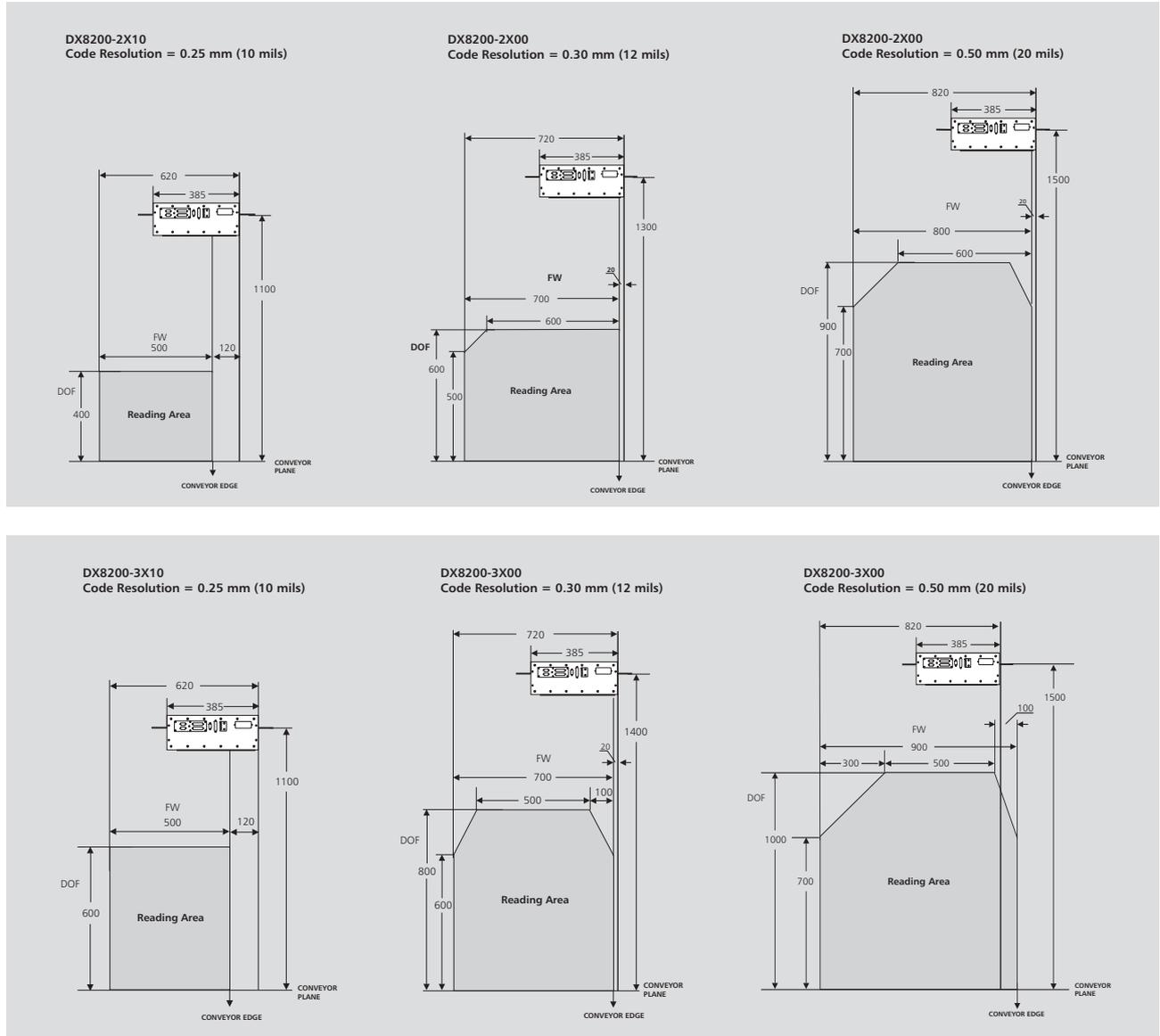
Installation is supported by a full line of accessories, including cables, connectors and power supply units, common to the 8000 product series.

Ease of use and installation make the DX8200 ideal for a vast range of industrial and logistics applications, where its exceptional price/performance ratio assures its leadership in the Material Handling market.

# READING DIAGRAMS

The following reading diagrams show how to install the DX8200 on a conveyor for optimal reading performance. The DX8200-XX10 high resolution models must be used for a code resolution of  $X < 0.3\text{mm}$ , while the DX8200-XX00 standard resolution model must be used for a code resolution of  $X \geq 0.3\text{mm}$ . The reading diagrams are defined in the following reference conditions:

- Good code quality (ANSI Grade B minimum)
- Reference code symbologies (Code 128)



## 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	7	9	12	14	16	18
CODE 128	0.30	8	10	12	15	19
CODE RESOLUTION	0.33	9	11	13	15	19
(mm)	0.38	10	12	14	16	20
	0.50	12	13	16	18	22
	0.60	14	15	17	19	24
	1.00	22	23	24	26	30

For operating parameters outside the reference conditions and to fully exploit the DX8200 performance and capabilities, Datalogic recommends contacting the local technical support department for a complete evaluation of specific needs and reading conditions.

## MODELS AND ACCESSORIES

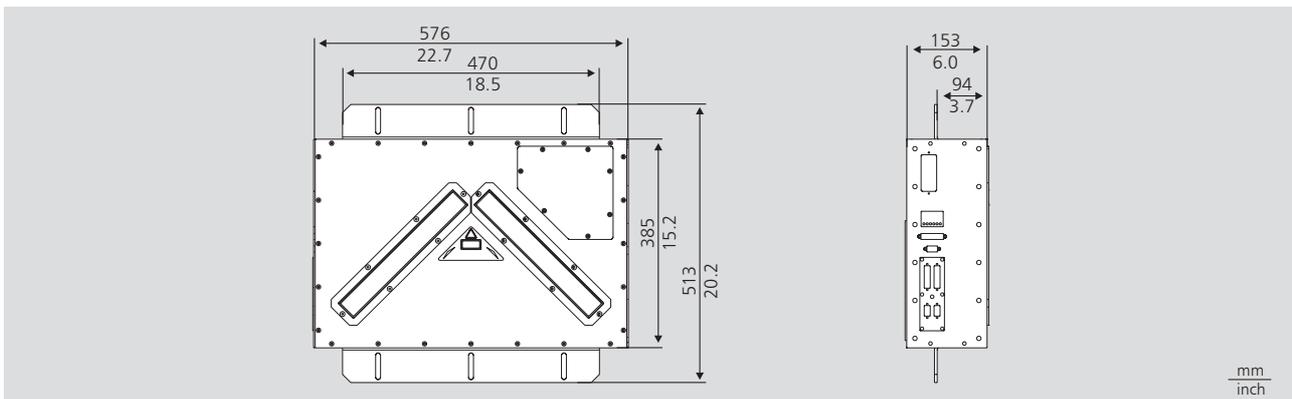
MODEL	LASER DIODES	INTERFACE	POWER SUPPLY	RESOLUTION	ORDER NO.
DX8200-2100	2	Serial	110/230 Vac	Standard	936101000
DX8200-2110	2	Serial	110/230 Vac	High	936101010
DX8200-3100	3	Serial	110/230 Vac	Standard	936101020
DX8200-3110	3	Serial	110/230 Vac	High	936101030
DX8200-2000	2	BUS	20-30 Vdc	Standard	936101040
DX8200-2010	2	BUS	20-30 Vdc	High	936101050
DX8200-3000	3	BUS	20-30 Vdc	Standard	936101060
DX8200-3010	3	BUS	20-30 Vdc	High	936101070

\*Refer to local Subsidiaries/distributors for complete list of DX8200 accessories

## SPECIFICATIONS

<b>POWER SUPPLY</b>		<b>INPUT SIGNALS</b>	2x 'Presence Sensor' and 1 'Encoder' (NPN/PNP transistor)
DX8200-X0XX (BUS)	20 to 30 Vdc, 30 W	<b>OUTPUT SIGNALS</b>	'No read', 'Right code' (NPN transistor open collector and emitter)
DX8200-X1XX (Serial)	85 to 264 Vdc, 50 to 60 Hz, 30 VA	<b>SET UP</b>	Via serial port commands and Windows™ based software program Winhost™
<b>LIGHT SOURCE</b>	Visible Laser Diode (650 nm)	<b>OPERATING MODES (Serial)</b>	'On line', 'Serial on line', 'Automatic', 'PackTrack', 'Test'
<b>LIGHT RECEIVER</b>	Avalanche photodiode	<b>LED INDICATORS</b>	6 LED status indicators
<b>MAX. RESOLUTION CODE</b>		<b>LASER CLASSIFICATION</b>	IEC 825 Class 2
DX8200-XX0X (Standard)	0.30 mm (12 mils)	<b>LASER CONTROL</b>	Security system to turn laser Off in case of motor slow down or failure
DX8200-X1XX (High)	0.25 mm (10 mils)	<b>DIMENSIONS</b>	576 x 513 x 153 mm (22.7 x 20.2 x 6.0 in)
<b>READING PATTERN</b>	Single cross	<b>WEIGHT</b>	22 Kg (48.5 lbs) approx.
<b>SCAN RATE</b>	1000 scan/s (500 scan/s for each scan line)	<b>CASE MATERIAL</b>	Aluminium
<b>DEPTH OF FIELD</b>	See reading diagram in the installation manual (application and bar code dependent)	<b>OPERATING TEMPERATURE</b>	0 to 45 °C (32 to 113 °F)
<b>CONVEYOR COVERAGE</b>	See reading diagram in the installation manual (application and bar code dependent)	<b>STORAGE TEMPERATURE</b>	-20 to 70 °C (-4 to 158 °F)
<b>READABLE CODES</b>	The most common symbologies incl. 2/5 family, Code 39, Code 128, EAN/UPC, EAN 128	<b>HUMIDITY</b>	90% non condensing
<b>CODE AUTODISCRIMINATION</b>	Up to 5 different codes	<b>VIBRATION RESISTANCE</b>	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
<b>SERIAL INTERFACE CARD</b>		<b>SHOCK RESISTANCE</b>	IEC 68-2-27 test EA 15 G, 11 ms; 3 shocks on each axis
Main interface	RS232/RS485/20 mA C.L.	<b>PROTECTION CLASS</b>	IP54
Baud rate	1,200 to 57,600 bauds		
Aux. interface	RS232/RS485		
<b>BUS INTERFACE CARD</b>			
Main interface	LONWORK		
Baud rate	1.250 Mbauds		

## DIMENSIONS



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We reserve the right to make modifications and improvements

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