



IDENTIFICATION

## APPLICATIONS

- Postal/Courier parcel sorting and tracking
- Automated warehousing identification systems
- Airport baggage sorting systems
- Cargo applications
- Loading/unloading systems

## ADVANTAGES

- Improved connectivity thanks to the introduction of built-in Ethernet with implemented TCP-IP, Ethernet/IP and Modbus TCP protocols
- DIGITECH™ Digitech technology permits full SW control over signal processing parameters Scanner setup can therefore be optimized quite simply by loading the right SW recipe, thus enabling excellent performance in all reading conditions
- Ease of use is increased due to a practical display with keyboard, offering a simple and complete human machine interface without PC
- Fully compatible with the DS8100A, the 6000 series (DS6300, DS6400) and the SC6000 industrial controller

## HIGHLIGHTS

- Omnidirectional reading
- ACR4™ 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™ multilanguage SW for easy scanner configuration/setup
- Display and keyboard
- Display and keyboard
- Built-in Ethernet TCP/IP connectivity

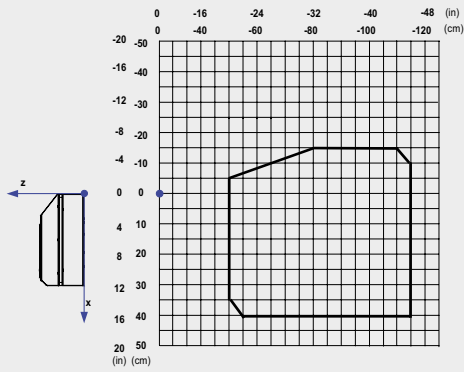
## GENERAL DESCRIPTION

DX8200A is based on an 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 and in any position, since as the DX8200A focuses on the bar code and not on the object profile. The PackTrack™ function reduces minimum object gap and increases system throughput. The SW platform of DX8200A, based on GENIUS™ configuration program, permits 100% control of scanner functionality via SW. Moreover, DIGITECH™ technology enables excellent reading performance along the entire depth of field.



## READING DIAGRAMS

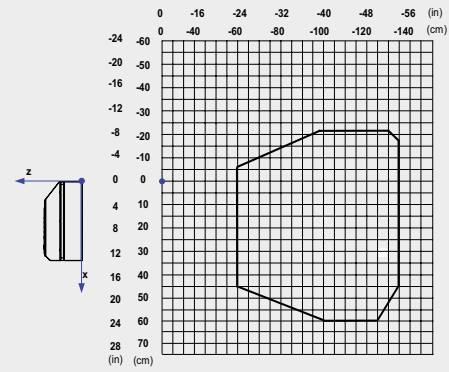
(0.25 mm/10 mils)



**CONDITIONS**

Code = Interleaved 2/5 or Code 39  
 PCS = 0.90

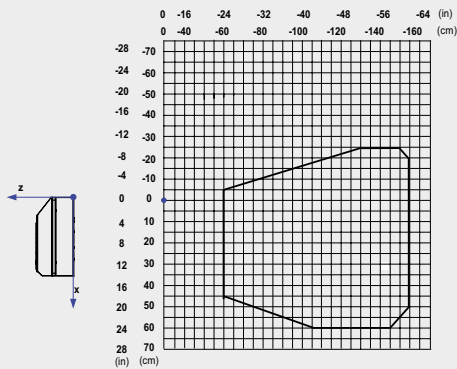
**DX8200A-3X2X**  
 (0.30 mm/12 mils)



**CONDITIONS**

Code = Interleaved 2/5 or Code 39  
 PCS = 0.90

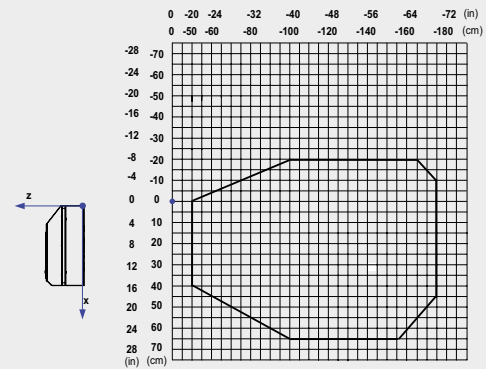
**DX8200A-3X1X**  
 (0.38 mm/15 mils)



**CONDITIONS**

Code = Interleaved 2/5 or Code 39  
 PCS = 0.90

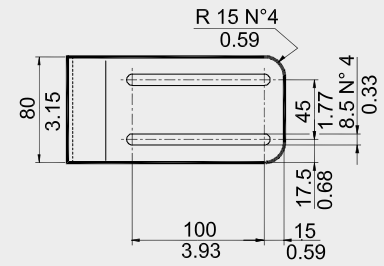
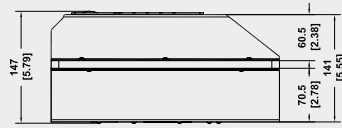
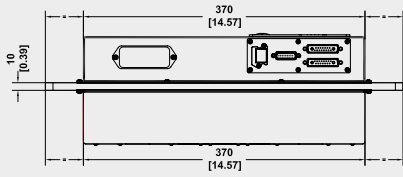
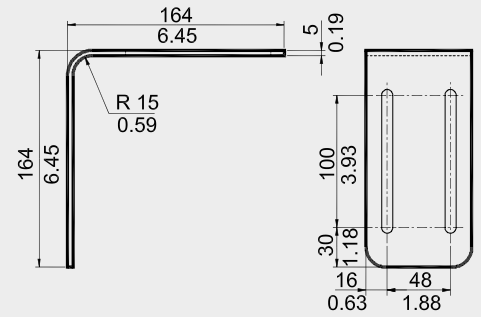
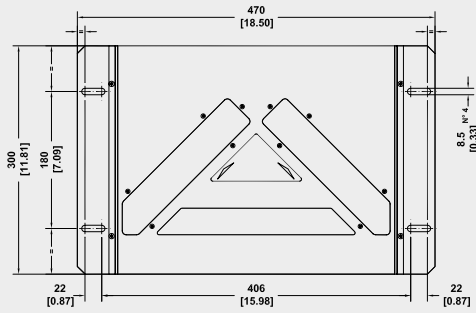
**DX8200A-3X1X**  
 (0.50 mm/20 mils)



**CONDITIONS**

Code = Interleaved 2/5 or Code 39  
 PCS = 0.90

## DIMENSIONS



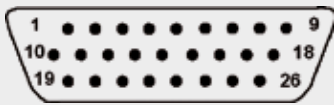
mm / inch

## ELECTRICAL CONNECTIONS

All the connectors available for each DX8200A model are the following:

SCANNER MODEL	CONNECTORS
Standard	26-pin male serial interface and I/O connector 17-pin male Lonworks connector* 17-pin female Lonworks connector*
Ethernet	26-pin male serial interface and I/O connector 17-pin male Lonworks connector* 17-pin female Lonworks connector* RJ45 Industrial modular connector

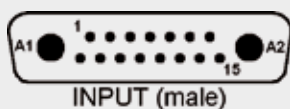
The DX8200A Standard and Fieldbus models are equipped with a 26-pin male D-sub connector for connection to the host computer, power supply and input/output signals.



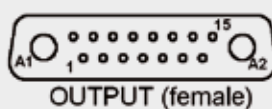
26-pin Connector

26-PIN D-SUB CONNECTOR PINOUT				
Pin	Name	Function		
1	CHASSIS	Chassis - internally connected to GND Cable shield connected to chassis		
20	RXAUX	Receive data of auxiliary RS232 (referred to GND)		
21	TXAUX	Transmit data of auxiliary RS232 (referred to GND)		
8	OUT 1+	Configurable digital output 1 - positive pin		
22	OUT 1-	Configurable digital output 1 - negative pin		
11	OUT 2+	Configurable digital output 2 - positive pin		
12	OUT 2-	Configurable digital output 2 - negative pin		
16	OUT 3A	Configurable digital output 3 - polarity insensitive		
17	OUT 3B	Configurable digital output 3 - polarity insensitive		
18	EXT_TRIG/PS A	External trigger (polarity insensitive) for PS		
19	EXT_TRIG/PS B	External trigger (polarity insensitive) for PS		
6	IN 2/ENC A	Input signal 2 (polarity insensitive) for Encoder		
10	IN 2/ENC B	Input signal 2 (polarity insensitive) for Encoder		
14	IN 3A	Input signal 3 (polarity insensitive)		
15	IN 4A	Input signal 4 (polarity insensitive)		
24	IN_REF	Common reference of IN3 and IN4 (polarity insensitive)		
9,13	VS	Supply voltage - positive pin		
23,25,26	GND	Supply voltage - negative pin		
Pin	RS232	RS232	RS485 Full-Duplex	RS485 Half-Duplex
2	Main Interface Signals (SW Selectable)	TX	TX485 +	RTX485 +
3		RX	RX485 +	
4		RTS	TX485 -	RTX485 -
5		CTS	RX485 -	
7		GND_ISO	GND_ISO	GND_ISO

## ELECTRICAL CONNECTIONS



scanner side  
external view



### Lonworks INPUT/OUTPUT Connectors

LONWORKS INPUT/OUTPUT 17-PIN CONNECTOR PINOUT			
Pin	Name	Function	
A1	GND	supply voltage (negative pin)	
A2	VS	supply voltage 20 to 30 VDC (positive pin)	
1	CHASSIS	Cable shield A – internally connected by capacitor to chassis	
3	CHASSIS	Cable shield B – internally connected by capacitor to chassis	
7	VS_I/O	Supply voltage of I/O circuit	
8	LON A+	Lonworks a line (positive pin)	
9	LON A-	Lonworks a line (negative pin)	
10	LON B+	Lonworks b line (positive pin)	
11	LON B-	Lonworks b line (negative pin)	
12	SYS_I/O	System signal	
13	SYS_ENC_I/O	System signal	
14	RES	Internally connected	
15	REF_I/O	Reference voltage of I/O circuit	
2,4,5,6	NC	Not Connected	



RJ45 Modular Jack

In DS8100A Ethernet models a RJ45 Modular Jack is provided for Ethernet connection.  
This interface and the connector pinout are IEEE 802.3 10 BaseT and IEEE 802.3u 100 BaseTX compliant.

RJ45 MODULAR JACK PINOUT			
Pin	Name	Function	
1	TX+	Transmitted data (+)	
2	TX-	Transmitted data (-)	
3	RX+	Received data (+)	
6	RX-	Received data (-)	
4,5,7,8	NC	Not connected	

## TECHNICAL DATA

Dimensions	319.5 x 248.7 x 99.7 mm (12.58 x 9.79 x 3.93 in)
Weight	3.3 Kg (7.26 lbs)
Case material	Steel
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 1.5mm; 10 to 55 Hz; 2 hours on each axis
Shock resistance	IEC 68-2-27 test EA 30 G 11 ms; OM: 15 G 11 ms; 3 shocks on each axis
Protection class	IP64 for standard models; IP65 on request
Light source	Visible laser diode (630 to 680 nm)
Scanning speed	1000 scans/s (500 scans per line)
Reading pattern	XSingle-cross
Resolution	See diagrams
Readable symbologies	22 symbologies including 2/5 family, Code39, Code93, Code128, EAN/UPC, EAN128, ISBN128
Multilabel reading	Up to 10 different symbologies during the same reading phase
Communication interfaces	Main Port: RS232/RS485 up to 115.2 Kbit/s Auxiliary Port: RS232 up to 115.2 Kbit/s
Other available interfaces	Lonworks (Master/Slave), Ethernet, Profibus, DeviceNet (optional)
Digital inputs	3 programmable and 1 Encoder (optocoupled); Auxiliary Input, NPN/PNP transistor (optocoupled)
Digital outputs	Three SW programmable, optocoupled, event driven
Display & keypad	LCD 16 x 2 characters & 3 keys
Led indicators	6 LED status indicators
Device programming	Windows™ based SW (Genius™) via serial or Ethernet link Serial Host Mode Programming sequences
Operating modes	'On-line', 'Serial On-line', 'Automatic', 'Continuous', 'PackTrack™', 'Test'
Laser classification	Class 2 - EN60825-1; Class II - CDRH
Laser control	Safety system to turn laser off in cases of motor slowdown or failure
Power supply:	10 to 30 VDC
Power consumption:	< 10 W

## MODELS

ORDER NO.	DESCRIPTION
936201000	DX8200A-3030, VERY HIGH RES, VDC
936201001	DX8200A-3130, VERY HIGH RES,ETH, VDC
936201002	DX8200A-3230, VERY HIGH RES,PBUS, VDC
936201003	DX8200A-3330, VERY HIGH RES,DNET, VDC
936201004	DX8200A-3020, HIGH RES, VDC
936201005	DX8200A-3120, HIGH RES, ETH, VDC
936201006	DX8200A-3220, HIGH RES, PBUS, VDC
936201007	DX8200A-3320, HIGH RES, DNET, VDC
936201008	DX8200A-3010, MEDIUM RES, VDC
936201009	DX8200A-3110, MEDIUM RES, ETH, VDC
936201010	DX8200A-3210, MEDIUM RES, PBUS, VDC
936201011	DX8200A-3310, MEDIUM RES, DNET, VDC
936201016	DX8200A-3031, VERY HIGH RES, VAC
936201017	DX8200A-3131, VERY HIGH RES,ETH, VAC
936201018	DX8200A-3231, VERY HIGH RES,PBUS, VAC
936201019	DX8200A-3331, VERY HIGH RES,DNET, VAC
936201020	DX8200A-3021, HIGH RES, VAC
936201021	DX8200A-3121, HIGH RES, ETH, VAC
936201022	DX8200A-3221, HIGH RES, PBUS, VAC
936201023	DX8200A-3321, HIGH RES, DNET, VAC
936201024	DX8200A-3011, MEDIUM RES, VAC
936201025	DX8200A-3111, MEDIUM RES, ETH, VAC
936201026	DX8200A-3211, MEDIUM RES, PBUS, VAC
936201027	DX8200A-3311, MEDIUM RES, DNET, VAC
936201032	DX8200A-3002, LOW RES, BHS

## ACCESSORIES

ORDER NO.	DESCRIPTION
93ACC1430	ACS-81 AIR CLEANING SYSTEM
93ACC1792	BK-8200 BRACKET 15 DEG
93A051298	BT-8100 TERMINATOR 8K FAMILY
93ACC1090	BTK-8100 BUS TERMINATOR KIT (5PCS)
93A051287	BTK-8102 DOUBLE TERMINATOR KIT (2 PCS)
93A051286	BTK-8500 IP65 TERMINATOR KIT (2 PCS)
93A051000	CAB-8005 CABLE SCANNER CONTROLLER 5m
93A051010	CAB-8010 CABLE SCANNER CONTROLLER 10m
93ACC1120	CAB-8100 10 WIRES SHIELD D 9.5mm, 50m
93A051020	CAB-8101 CABLE SCANNER SCANNER 1.2m
93A051030	CAB-8102 CABLE SCANNER SCANNER 2.5m
93A051040	CAB-8105 CABLE SCANNER SCANNER 5m
93A051268	CAB-8305 POWER & TERMINATION CABLE 5 M
93A051336	CAB-8310 POWER AND BUS RETURN CABLE 10M
93ACC1758	CAB-8402 NO POWER CABLE FAM 8K 2,5m
93ACC1759	CAB-8405 NO POWER CABLE FAM 8K 5m
93A051283	CAB-8501 IP65 CABLE FAM 8K 1,2m
93A051284	CAB-8502 IP65 CABLE FAM 8K 2,5m
93A051285	CAB-8505 IP65 CABLE FAM 8K 5 m
93A051290	CAB-8605 POWER+2TERM. CABLE FAM 8K 5m
93A051295	CAB-PWO 03 CABLE PWO TO PWO, 3M
93A051338	CAB-SC6003 25P SC6K TO PWO, I/O, 3M
93A051337	CAB-SC6013 25p SC6K TO PWO, PWR/NET, 3m
93A051294	CAB-SC6103 9p CAB SC6000 TO PWR, 3m
93ACC1130	FBK-8100 FAST BRACKET KIT (2PCS)
93ACC1750	FS-1 FRAME SHAPER (8PCS)
93ACC1878	FS-2 SMART FRAME SHAPER (2 PCS)
93A251020	GFC-80 90° DEGREES MIRROR DS8100
93A201103	GFC-800 90° DEG MIRROR CL. DIST. DS8100
93ACC1280	PLL-8000 OPTOCOUPLED PLL DEVICE
93ACC1767	PWO-480 POWER OMNI SYSTEM 480W
93ACC1530	PWR-120-JBOX POWER UNIT 110/230VAC 24V
93ACC1070	PWR-240-JBOX POWER UNIT 110/230VAC 24V
93ACC1757	UPT-80 DX8200A-DX8200 ADAPTER
93ACC1140	US-8100 BRACKET KIT (10PCS) DS8100
93A051355	CAB-F01 6K/8K FBUS CABLE TO CBX 1M
93A051356	CAB-F02 6K/8K FBUS CABLE TO CBX 2M
93A051357	CAB-F05 6K/8K FBUS CABLE TO CBX 5M
93A051288	CAB-6502 FAM 6K-8K CABLE 2,5m
93A051289	CAB-6505 FAM 6K-8K CABLE 5m
93ACC1600	OEK-1 OPTICAL ENCODER KIT+ CABLE 10m
93ACC1770	OEK-2 OPTICAL ENCODER (CAB 10m+SPRING)
93ACC1791	MEP-593 PHOTOCCELL KIT