

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

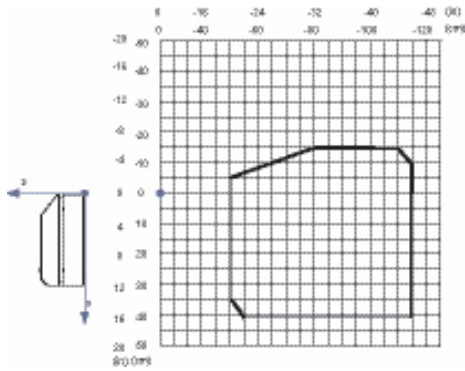
GENERAL DESCRIPTION

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.



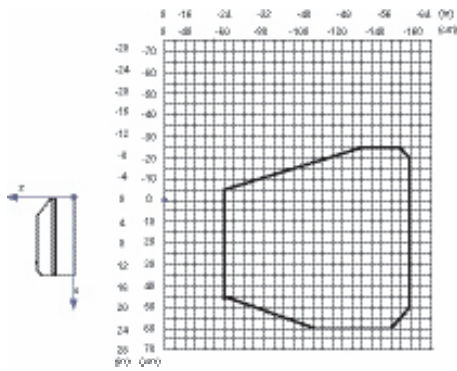
READING DIAGRAMS

(0.25 mm/10 mils)



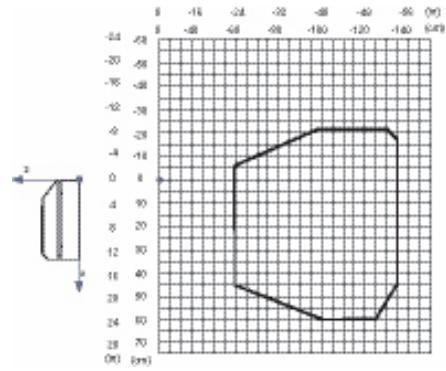
CONDITIONS
Code = Interleaved 2/5 or Code 39
PCS = 0.90

DX8200A-3X1X
(0.38 mm/15 mils)



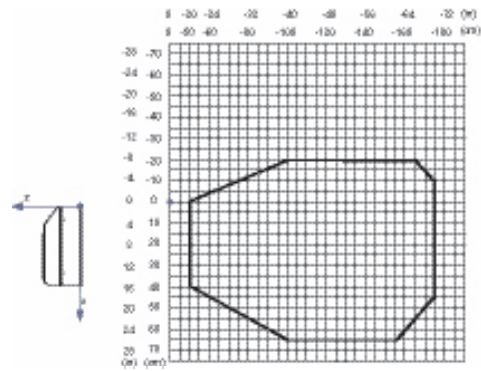
CONDITIONS
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PCS = 0.90

DX8200A-3X2X
(0.30 mm/12 mils)



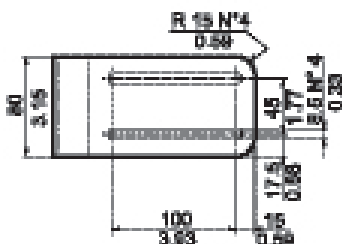
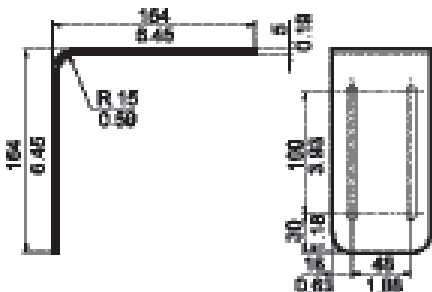
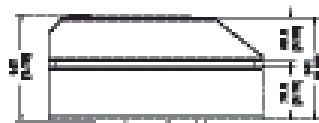
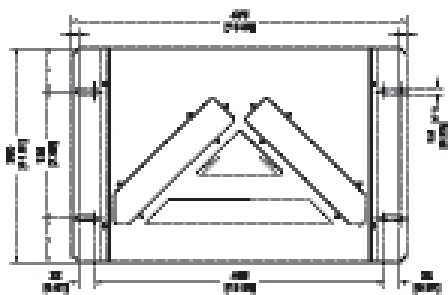
CONDITIONS
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PCS = 0.90

DX8200A-3X1X
(0.50 mm/20 mils)



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

DIMENSIONS



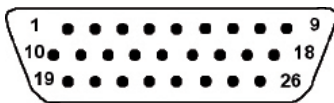
mm / inch

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 |

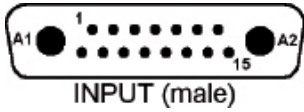
The DX8200A Standard and Fieldbus models are equipped with a 26-pin male D-sub connector for connection to the host computer, power supply and input/output signals.



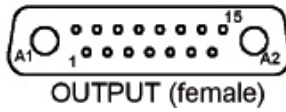
26-pin Connector

| 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 |

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

| 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 | Single-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 |