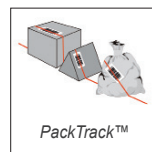
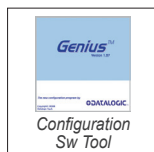




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APPLICATIONS

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

ADVANTAGES

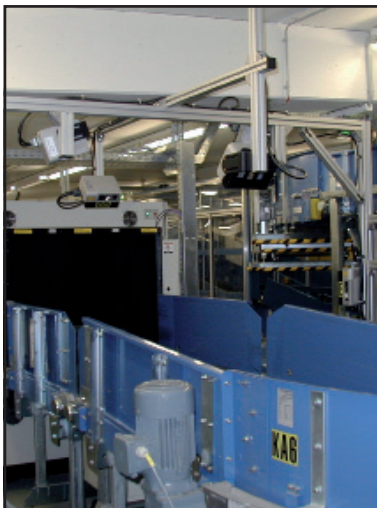
- Easily and rapidly configured thanks to Datalogic GENIUS™ (intuitive and multilanguage configuration program)
- DIGITECH™ Digitech technology permits full SW control over signal processing parameters. Scanner setup can therefore be optimized quite simply by loading the right SW recipe, thus enabling excellent performance in all reading conditions
- A simplified replacement procedure enables reduced down time due to automatic SW configuration restore in the new device
- Unbeatable reading performance and reliability on fast moving conveyor systems are ensured by ASTRA™ electronic focusing system (no mechanical moving parts)
- PackTrack™ function reduces the minimum object gap while enabling higher system throughput
- Fully compatible with DX8200A, 6000 series (DS6300, DS6400) and SC6000 industrial controller

HIGHLIGHTS

- Reading performance benchmark
- ACR4TM code reconstruction algorithm
- ASTRATM technology for the electronic focusing system
- DIGITECHTM signal processing technology
- PACKTRACKTM to minimize the gap between objects and increase system productivity
- GENIUSTM multilanguage SW for easy scanner configuration/setup
- Display and keyboard
- Built-in Ethernet TCP/IP connectivity

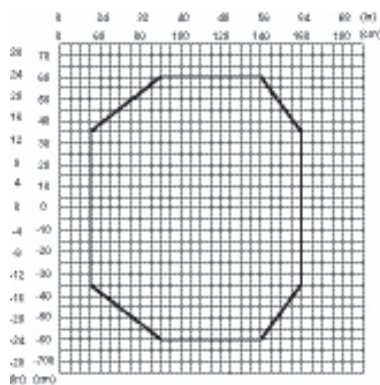
GENERAL DESCRIPTION

DS8100A represents the evolution of a winning concept which started in 1998: the use of state-of-the-art technology to design the best performing fixed position scanner on the market. DS8100A is based on an innovative 3-diode structure that offers an unbeatable real time depth of field. Connectivity has been improved with the introduction of built-in Ethernet connectivity with implemented TCP-IP, Ethernet/IP and Modbus TCP protocols. A practical display with keyboard increases DS8100A ease of use by offering a simple and complete human machine interface without PC. The SW platform of the new DS8100A, based on GENIUSTM configuration program, permits 100% control of scanner functionality via SW. Moreover, DIGITECHTM technology enables excellent reading performance along the entire depth of field.

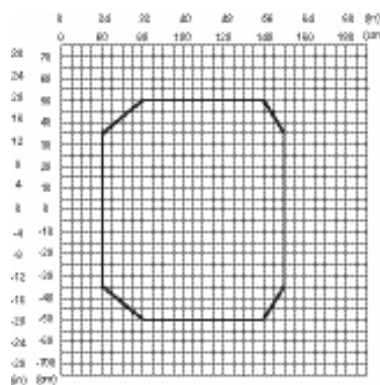


READING DIAGRAMS

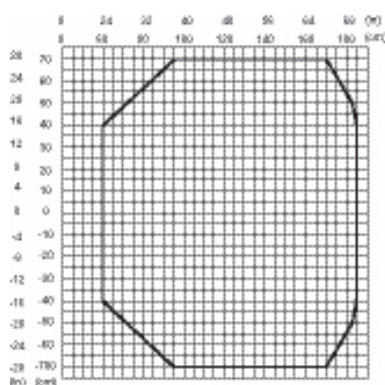
DS8100A-2X10
0.50 mm/20 mils



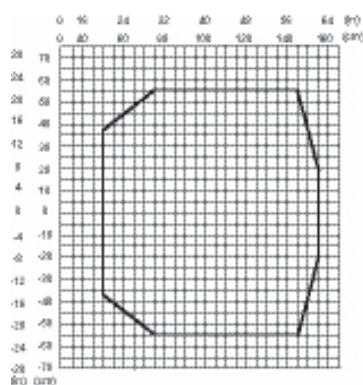
DS8100A-2X10
0.38 mm/15 mils



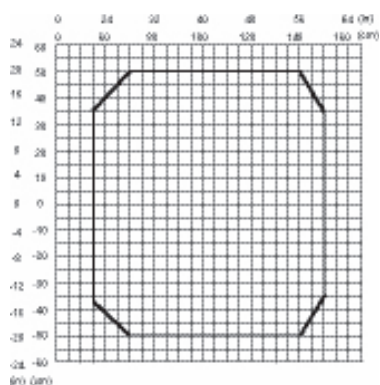
DS8100A-3X00
0.50 mm/20 mils



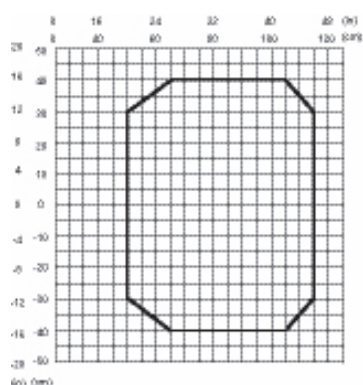
0.38 mm/15 mils



DS8100A-3X20
0.30 mm/12 mils



DS8100A-3X30
0.25 mm/10 mils



CONDITIONS

Code = Interleaved 2/5 or Code 39

PCS = 0.90

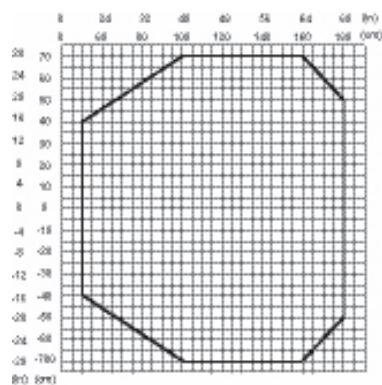
"Pitch" angle = 0°

"Skew" angle = 10°

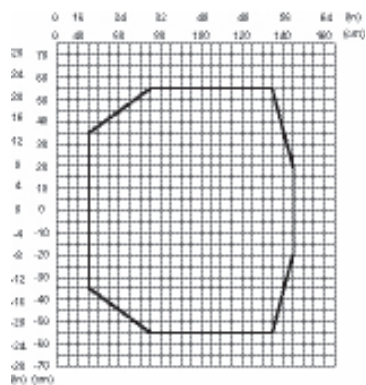
"Tilt" angle = 0°

READING DIAGRAMS

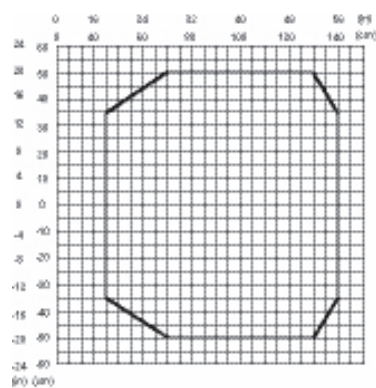
DS8100A-3X05
0.50 mm/20 mils



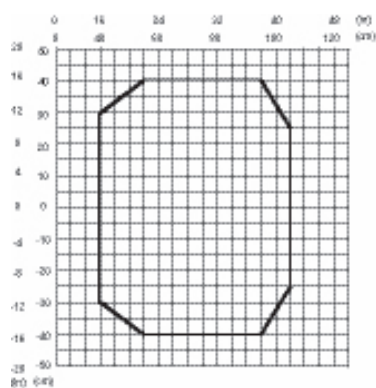
DS8100A-3X15
0.38 mm/15 mils



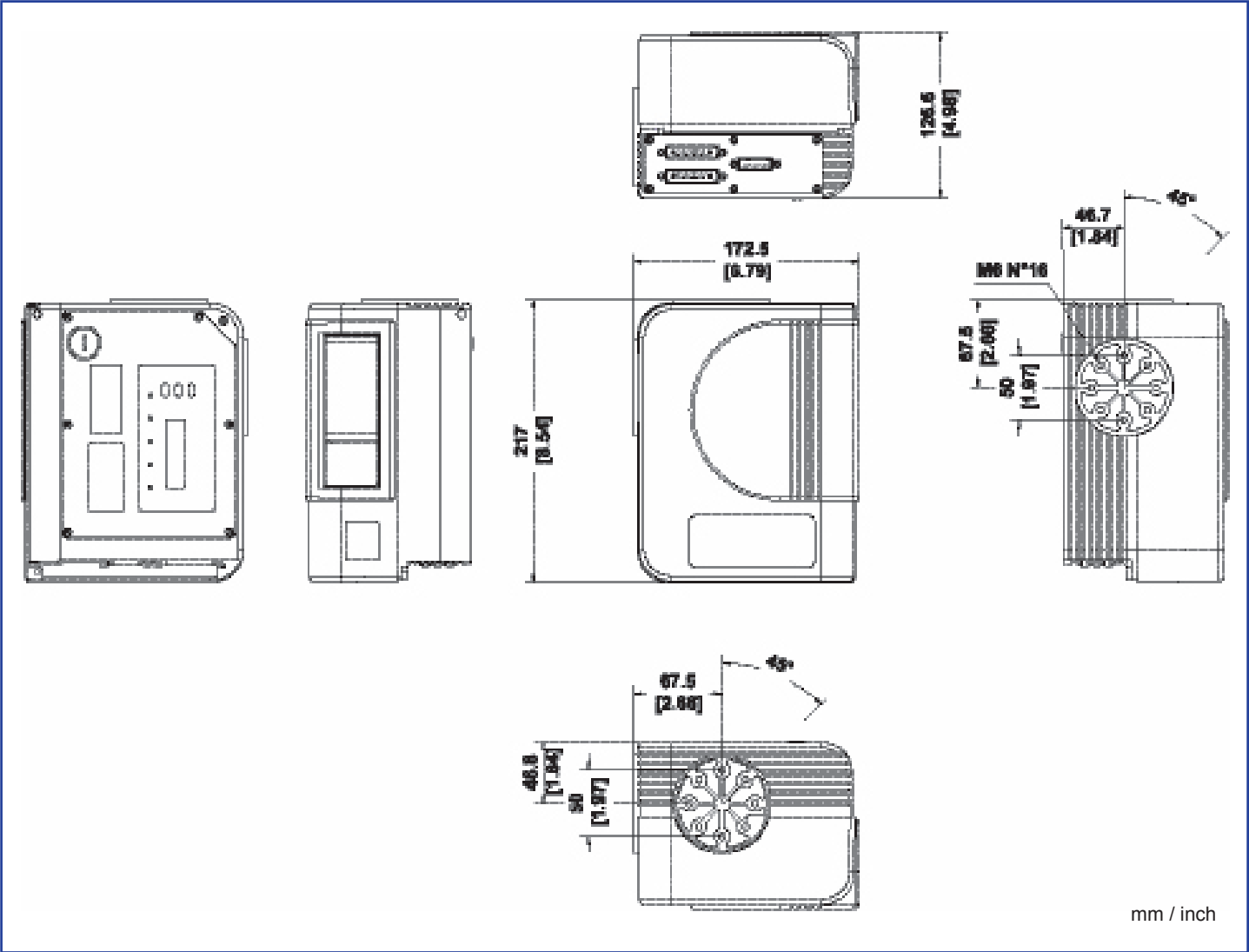
DS8100A-3X25
0.30 mm/12 mils



DS8100A-3X35
0.25 mm/10 mils



DIMENSIONS

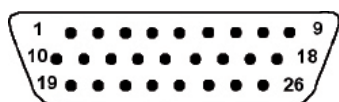


ELECTRICAL CONNECTIONS

All the connectors available for each DS8100A 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 |

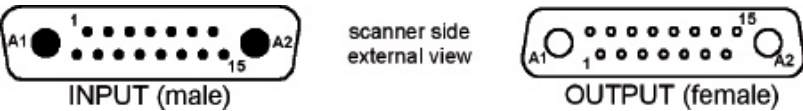
The DS8100A Standard and Fieldbus models are equipped with a 26-pin male D-sub connector for connection to the host computer, power supply and input/output signals.



26-pin Connector

| 26-PIN D-SUB CONNECTOR PINOUT | | | | |
|-------------------------------|---|---------|--|-------------------|
| Pin | Name | | Function | |
| 1 | CHASSIS | | Chassis - internally connected to GND | |
| 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



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

| 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 | 215.5 x 170.5 x 126.5 mm (8.48 x 6.71 x 4.98 in) | 280 x 254 x 195 mm (11.03 x 10 x 7.68 in) |
| WEIGHT | 5.0 Kg (176.3 oz.) | 6.4 Kg (225.7 oz.) |
| CASE MATERIAL | Aluminum | |
| 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 | |
| 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 (optional) | |
| DIGITAL INPUTS | Three SW programmable and One "Encoder", optocoupled, NPN/PNP | |
| DIGITAL OUTPUTS | Three SW programmable, optocoupled, event driven | |
| DISPLAY & KEYPAD | LCD 16 x 2 characters & 3 keys | |
| LED INDICATORS | 1) Power On (red) Good Read (red); | |
| | 2) Trigger (yellow) TX Data (green); 3) Encoder (yellow) Network (red) | |
| 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 | 20 to 30 VDC | |
| POWER CONSUMPTION | 20 W typical, 30 W max | |

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| Product | Code | Reference | Product link |
|--------------------------------------|-----------|--------------|----------------------------|
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| DS8100A-3125, HIGH RES, OM, ETH | 932402749 | DS8100A-3125 | Buy on EAN |