

IS3000



Production Control

Stock Control

Security

Data Acquisition

EEx ia IIB T4



Intrinsically Safe Bar-Code Scanners

The Spectra-Tek IS3000 Intrinsically Safe bar-code laser scanners are robust high performance, non contacting industrial instruments specifically designed for use in Hazardous Areas.

Certified EEx ia IIB T4 these laser scanners bring to industrial Hazardous Areas the latest information gathering technology.

The IS3000 is based upon Symbol's LS3000 gun, engineered by Spectra-Tek to Intrinsically Safe standards. The scanner is available as stand-alone or as an enhancement to the Spectra-Tek Mercury IS operator terminal, to provide a complete Hazardous Area data gathering system, which may be interfaced to host computers, PC's and control systems in the Safe Area.

- ▼ Intrinsically Safe for Hazardous Areas
- ▼ Weather proof or Washable to IP64
- ▼ Bright Visible Laser
- ▼ Ranges from 0-85cm to 0-610cm (nominal)
- ▼ Operational temperatures from -10 to 40°C
- ▼ Replaceable coiled cable with 20' optional length
- ▼ Double Action trigger allows "aim & shoot"
- ▼ Audible Beep, LED Flash on Successful "Read"

Technical Data

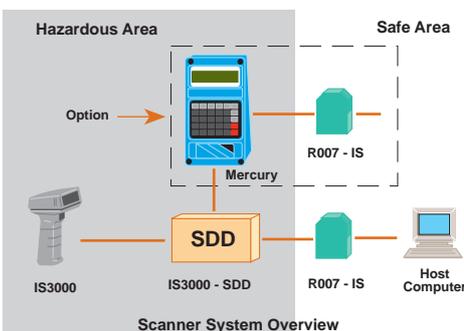
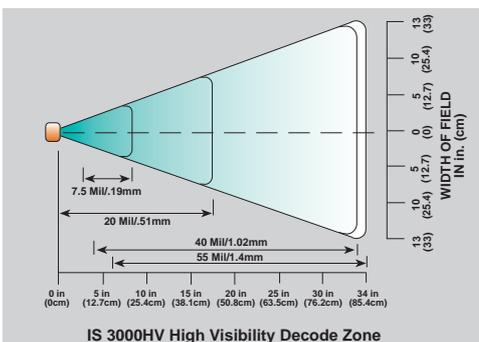
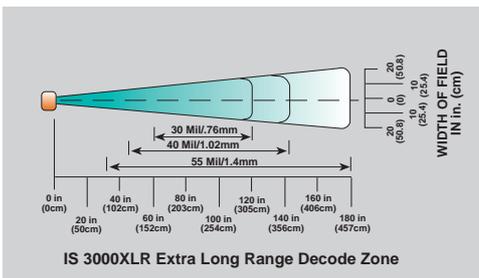
The IS3000 hand-held laser scanners are robust industrial Intrinsically Safe bar-code readers.

The scanner housing, in a handy pistol shape, is formed in rugged ABS and houses the laser, mirror scanner and appropriate optical and electronic assemblies. Operation is by a dual-pressure trigger within the grip handle. The first pressure causes a bright, narrow-width scan enabling the operator to aim the gun at the required bar-code. Further finger pressure causes the scanner to emit the full-width scan enabling the reading process.

As soon as a satisfactory read is detected, usually within 0.2 seconds, the laser is turned off, an audible beep is emitted and a green LED is flashed.

A flexible coiled cable connects the scanner to the local IS3000-SDD Scanner Decoder Driver via a water-proof plug and socket.

The IS3000-SDD unit auto-discriminates all popular bar-code symbologies and assembles the resulting code into serial ASCII format for transmission to a computer/terminal.



IS3000-HV and LR - Scanner Guns

Physical Characteristics

Dimensions	160 mm High 127 mm Long 71 mm Wide
Weight	300 grams
Cable connection	Replaceable 1.8 m coiled extendible cable with plug
Durability	1.8m impact drop onto concrete (30 times)

Scanning System

Laser	Class III A visible laser diode
Scan rate	36 scans/sec. bidirectional
Ranges Available	0-85cm to 0-610cm nominal (see diagrams)
Ambient light	Tolerant to incandescent/fluorescent and sunlight
Aiming	2 pressure trigger gives "aim and shoot"

Environmental

Storage temperature	-40°C to +60°C
Operating temperature	-10°C to +40°C
Humidity/water	5%-95% non-condensing and tolerates dripping water
EMI generation	Conforms to FCC Class A and B

IS3000-SDD/IS - Scanner Decoder Driver

Physical Characteristics

Dimensions	Cast alloy enclosure with sealed removable lid 260 mm long 160 mm wide 95 mm high
Weight	2.2 kg.
Colour	Cobalt blue

Environmental

Protection	IP65
Storage temperature	-40°C to +60°C
Operating temperature	-10°C to +40°C

Connection

Internal screw-terminals for power and serial data accessed via 20 mm glands.

Scanner socket mounted on surface of enclosure.

Decoder

Supports and auto-discriminates all standard bar-code symbologies e.g.

- Code 39 Full ASCII
- UPC/EAN
- Interleaved 2 of 5
- Code 128
- Codabar

Output

Serial ASCII with selectable parity/stop/ baud rate up to 9600, with optional terminators.

Interface

Requires R007-IS barrier unit for Intrinsic Safety, to be mounted in a safe area, giving RS232/422/485 to host computer/terminal

Max Cable Length

Between SDD and R007-IS 1km

Intrinsic Safety

Model numbers for scanners and decoders ending with/IS are certified to EEx ia IIB T4 for use in Zone 0, Hazardous Areas with Gas Groups IIA and IIB and Surface Temperature Class T4

Certificate Nos

IS3000 SCS No Ex 94C2044X
R007-IS SCS No Ex 90C2017

The IS3000 is also available in a general purpose form for safe area operation. Please ask for further details

Further Information

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