## **FIXED POSITION SCANNER**

# MaxiScan<sup>™</sup> 3100

#### Benefits:

- Compact, rugged, sealed, fixed industrial scanners
- High performance linear image (CCD) or laser model variants
- Includes decoder, sychronization and serial interface
- Easy and fast to setup using EasySet<sup>™</sup> software to print and scan setup codes or download to flash
- Direct, multi-head or network connection options
- Applications include conveyor, integrated and other fixed applications in manufacturing, logistics and health care



The MaxiScan 3100 is a range of rugged, compact, fixed industrial bar code scanners that are easy to select, install and configure. The M3100 offers a choice of Intermec's linear image (CCD) or laser scanning technologies:

- M3100 SR (CCD) linear image scan engine for close reading applications (to 10cm/4")
- M3100 ST (Laser) scan engine for applications requiring a longer depth of field (to 35cm/14.")
- M3100 ML (Laser) multi-line scan engine for applications requiring a larger scanning area. The SR engine features new patented technology that provides a fast scan rate of up to 800 scans per second to ensure instant reading.

The ST and ML engines provide an extended depth of field and

also a fast scan rate of 200 scans per second.

All scan engine options offer simple and reliable scanning in a tough, sealed case (IP65/Nema 12). The compact size and mounting options make installation easy whether in a horizontal or vertical plane.

The serial interface provides compatibility with the MaxiScan 3300 fixed position scanners, MCS connection system and MaxiScan 3010 RS 485 network concentrator (for network or multi-head configurations).

The MaxiScan 3100 is part of the MaxiScan fixed scanner range (includes M3300) and, in common with most Intermec scanners, the M3100 is supplied with EasySet setup software for the fastest on-line or off-line configuration.



# MaxiScan<sup>™</sup> 3100

#### General

The MaxiScan 3100 is a range of high performance industrial bar code scanners for fixed applications. Models include 3100SR, 3100ST and 3100ML

#### **Physical Characteristics**

Height: 36mm (1.4") Width: 56mm (2.2") Depth: 75mm (2.9")

Cable: 1m (3.2'), connector DB 15 pin F

Case: Epoxy coated aluminum

### **Scanning Performance**

#### Performance: 3100 SR

Scan Rate: 100 to 800 scans/s, default

100 to 400 auto-adaptive

Minimum X dimension: 0.1mm (4 mil)

Depth of field: 0 to 10 cm (4") depending on code:

0.1 mm (4 mil): 2-4.4cm (0.78-1.7") 0.2 mm (8 mil):1-5.8cm (0.39-2.3") 0.3 mm (12 mil): 1-7cm (0.4-2.7") 0.5mm (20 mil): 2-8.4cm (0.78-3.3")

Scan angle: 70° PCR: 25% minimum

**Code Width:** 12 cm (4.7") max (X above .254mm/10 mil)

**Skew:** +- 65° **Pitch:** +- 70°

*Performance: 3100 ST/ML* 

Scan Rate: 200 scans/sec

Minimum X dimension: 0.1 (4 mil)

**Depth of field:** up to 33cm (13")

depending on code:

0.1 mm (4 mil): 12-16cm (4.7-6.3") 0.2 mm (8 mil):7-23cm (2.7-9") 0.3 mm (12 mil): 4-26cm (1.5-10.2") 0.5mm (20 mil): 5-35cm (2-14")

Scan angle:  $65^{\circ}$  PCR: 20% minimum Skew: +-  $55^{\circ}$ 

Pitch: +- 65°

### **Symbologies**

Code 39; Interleaved, Matrix, Industrial and Standard 2 of 5; Code 128, UCC EAN 128, UPC E,A, EAN, Codabar, Code 93, MSI, Plessey, PDF 417

#### **Operator Interface**

Power and good read LED Good read beeper

#### Design

**Processor:** Custom chip (ASIC inc. DSP processor) for fast signal processing and decoding. Flash memory

**3100 SR Optics:** CCD linear image sensor with sharp aiming beam **Light source:** red, long life LEDs

**3100 ST/ML Light Source:** visible laser diode @ 650nm, 0.45mW max output **Laser class:** IEC 825 Laser Class 2/US

CDRH 21 CFR Class II

#### **Environmental Characteristics**

**Operating temperature:** 0° to 40°C

(32° to 104°F)

**Storage temperature:** -25° to 60°C

(-13° to 140°F)

Relative humidity: 10% to 90% non-

condensing

Shock resistance: IEC 68.2-27 Test Ea (30G, 11ms) 3 Shock/axis, 3 axis

**Vibration resistance:** IEC 68-2-6 Test Fc (1.5mm, freq.: 10 to 55Hz) 2 hours/

axis, 3axis

Sealing: IP65/Nema 12

## **Electrical Characteristics**

Power requirements: + 7-25 VDC, 5W

Power consumption: 2.5W

#### Synchronization and Advanced Features

Auto sensing wake-up modes, variable time-out, input and output sychronization, firmware updates via flash memory, programmable data format (code identification, preambles and postambles, intercharacter and intermessage delays)

#### **Interfaces**

RS 232 C. By adapter: RS 485, RS 422 and Current Loop

#### Accessories

**Standard:** EasySet CD, horizontal/vertical mounting bracket

Options: Adjustable stand, MCS connection system (with power, host and synchro ports), host RS 232 C cable, Y cable for host port and power input, package sensor, MaxiScan 3010 network, network cables 1m/3m (3.2'/9.6'), RS 232 to RS 485 adapter, external power supplies

#### Configuration

Setup options include EasySet PC Windows™ software, by direct connection & bar code printing (custom setup utility), or by conventional bar code setup manual

#### **Regulatory Approvals**

#### All models:

Compliant with all European Directives: CE (EN 50081-1/EN 50082-2/EN 60950)

USA:

FCC Part 15 compliant: Class B digital device

#### Canada:

ICES-003, NMB003: Class B digital apparatus

apparatus

**Australia – New Zealand:** AS/NZS 3548 C-tick marked Other approvals pending

3100 ST version only:

DHHS Standard 21CFR (1996) 1040. 10 and 1040.11 Class II Laser Product IEC 825-1, EN 60825-1, Class 2 Laser

Product

## Laser Caution Label



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