EV12

Value Performance APS Scan Engine

- **Ultra-compact size yet extremely durable**

- **Intermec linear CMOS sensor using APS technology**

- **617nm highly visible aiming**

- **Up to 500 scans per second**

- **3.3 V low power operation preserves battery life**

- **Provides safe scanning**

Combining compact size ($5.2cm^3$/$0.32in^3$) and great scanning performance, the EV12 is the value version of the Intermec best-selling EV15 engine. The EV12 is based on the Intermec linear CMOS sensor using state-of-the-art Active Pixel Sensor (APS) technology. The EV12 is ideal for OEM applications where space is limited for scanner integration in both portable and fixed devices, including hand held terminals, PDAs, PC and cell phone peripherals, lottery terminals, time and attendance terminals, ski-pass, automated sorting machines and more.

Unique Reading Performance
The EV12 benefits from the latest generation of Intermec standard algorithms delivering great performance. The EV12 has a scan rate and a depth of field enabling it to read poorly printed, damaged, low contrast, wide or high density bar codes.

Bright and Sharp
The EV12 uses a unique 617nm illumination system to provide a safe and sharp aiming line. With the EV12, you can clearly see what you are scanning, even in brightly lit or backlit conditions, thus improving usability and throughput.

Low Power
The EV12 provides easy electrical connection. The 3.3V low power operation is ideal for preserving battery life in mobile applications. Additionally, the standby current is reduced to micro amps to preserve the host device battery when the scan engine is not in use.

Outstanding Reliability
With no moving parts and no laser diode, the EV12 has a longer life than any laser scanner (MTBF above 250Kh). It's rugged design means it can withstand 2000G shocks and 50G vibrations and can be used in a wide temperature range.

Protect Your Investment
Ultra compact, reliable and easy to integrate, the EV12 is field upgradable (flash memory) as a provision for future requirements.

Give the power of Intermec APS technology to your design; choose the EV12 to differentiate from your competitors.

Intermec®

Design
Processor: New generation custom chip (ASIC)
Sensor: APS CMOS linear image sensor
Light Source: 617 nm bright and sharp scanning line

Scanning Performance
Light source: 617nm Highly Visible LED
Scan Rate: decoded operation = 500 scans/s
autoadaptive undecoded operation = 200 scans/s
Scan angle: 38°
Print Contrast: down to 25%
Min x. dimension: 0.15 mm (6 mils)
Reading distance: up to 40cm (16 in)

Physical Characteristics
Dimensions: 11.4mm H x 22.5mm D x 20.6mm W
(0.45" H x 0.89" D x 0.81" W)
Weight: 12g

Symbologies
UPC (E&A), EAN, RSS, Code 39, Code 128, UCC/EAN
128, ISBN, ISBT, Interleaved, Matrix, Industrial and
Standard 2 of 5, Codabar, Code 93/93i, Code 11, MSI,
Plessey, Telepen.

Interfaces
Decoded mode: RS232 TTL with Intermec Scanner
Control Protocol (ISCP)
Undecoded mode: industry standard DBP output

Connection
12 pin ZIF connector, pitch 0.5 mm (0.2 in)

Electrical Characteristics
Voltage: 3.1 to 3.6V
Current: <80 mA typ @3.3V
Standby current: <1uA

Environmental Characteristics
Operating temperature: -30° to 50°C (-22° to 122°F)
Storage temperature: -40° to 70°C (-40° to 158°F)
Relative humidity: 5% to 95% (non-condensing)
Shock: 2000G, 0.7ms, half sinus, 3 axes
Vibration: 50G r.m.s.
Ambient light: works in any lighting conditions,
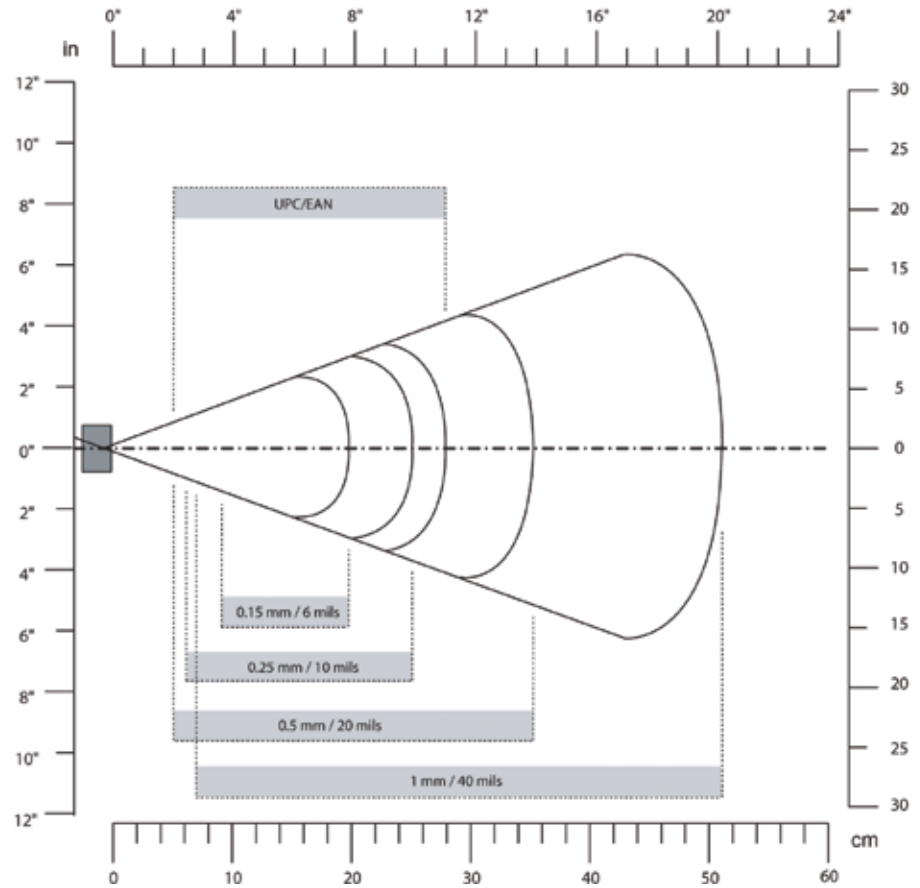from 0 to 100 000 lux

Regulatory Approvals
UL recognized component, VDE certified, RoHS
compliant

Accessories
Demonstration kit

EV12 Typical Reading Distances

Symbology	Density	Minimum Distance	Maximum Distance
Code 39	0.15 mm / 6 mils	9 cm / 3.5"	20 cm / 7.9"
	0.25 mm / 10 mils	6 cm / 2.4"	25 cm / 9.8"
	0.5 mm / 20 mils	5 cm / 2"	35 cm / 13.8"
	1 mm / 40 mils	7* cm / 2.8"	51 cm / 20.1"
UPC/EAN	0.33 mm / 13 mils	5 cm / 2"	28 cm / 11"

*Minimum distance depends on bar code width and scan angle.

RoHS compliant

In a continuing effort to improve our products, Intermec
Technologies Corporation reserves the right to change
specifications and features without prior notice.

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