

# EV15

## High Performance APS Scan Engine



- Ultra-compact size yet extremely durable
- Intermec bi-linear CMOS sensor using APS technology
- 617nm highly visible aiming
- Up to 500 scans per second
- New generation Vista™ decoding technology
- 3.3 V low power operation preserves battery life
- Provides safe scanning

Combining compact size (5.2cm<sup>3</sup>/0.32in<sup>3</sup>) and exceptional scanning performance, the EV15 is the decoded version of the Intermec best-selling EV10 engine. The EV15 is based on the Intermec patented bi-linear CMOS sensor using state-of-the-art Active Pixel Sensor (APS) technology. The EV15 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, tape libraries and more.

### Unique Reading Performance

The EV15 benefits from the latest generation of Intermec patented Vista™ algorithms delivering unparalleled performance. The EV15 has a very high scan rate and a large depth of field enabling it to read even the most elusive bar codes including poorly printed, damaged, low contrast, wide or high density.

### Bright and Sharp

The EV15 uses a unique 617nm illumination system to provide a safe, bright and sharp aiming line. With the EV15, you can

clearly see what you are scanning, even in brightly lit or backlit conditions, thus improving usability and throughput.

### Low Power

The EV15 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 EV15 has a longer life than any laser scanner (MTBF above 250Khr). Its 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 EV15 is field upgradable (flash memory) as a provision for future requirements.

Give the power of Intermec APS technology to your design, choose the EV15 to differentiate from your competitors.

**Design**

**Processor:** New generation custom chip (ASIC) with Vista™ decoding  
**Sensor:** APS CMOS bi-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:** 40°  
**Print Contrast:** down to 25%  
**Min x. dimension:** 0.1 mm (4 mils)  
**Reading distance:** up to 90cm (35 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, PDF417, Macro PDF417.

**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:** 110 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

**Accessories**

Demonstration kit

**North America**

**Corporate Headquarters**  
 6001 36th Avenue West  
 Everett, Washington 98203  
 Phone: (425) 348-2600  
 Fax: (425) 355-9551

**South America & Mexico**

**Headquarters Office**  
 Newport Beach, California  
 Phone: (949) 955-0785  
 Fax: (949) 756-8782

**Europe/Middle East & Africa**

**Headquarters Office**  
 Reading, United Kingdom  
 Phone: +44 118 923 0800  
 Fax: +44 118 923 0801

**Asia Pacific**

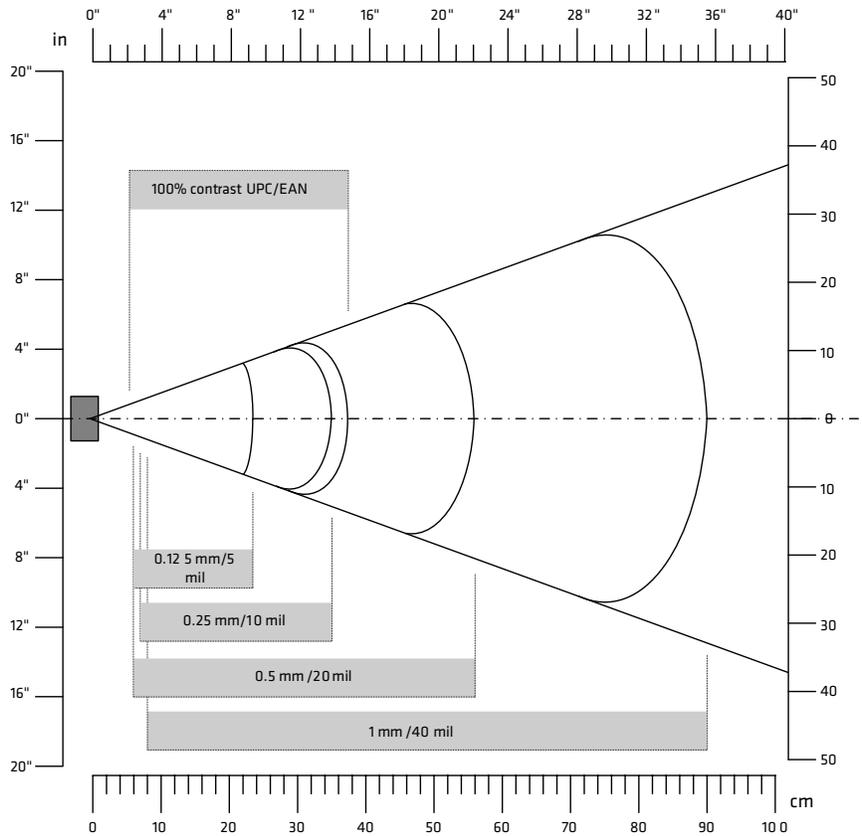
**Headquarters Office**  
 Singapore  
 Phone: +65 6303 2100  
 Fax: +65 6303 2199

**Internet**

www.intermec.com  
 Worldwide Locations:  
 www.intermec.com/locations

**EV15 Reading Distances**

Typical reading distances on high quality barcodes



Typical reading distances on high quality symbols

Symbology	Bar Code Content	Density	Minimum Distance	Maximum Distance
<b>Code 39</b>	RESO 0.100 MM	0.1 mm / 4 mil	10 cm / 3.9"	15 cm / 5.9"
	R 0.125 MM	0.125 mm / 5 mil	9 cm / 3.5"	18.5 cm / 7.3"
	0.25	0.25 mm / 10 mil	5.5 cm / 2.2"	27.5 cm / 10.8"
	.5	0.5 mm / 20 mil	4 cm / 1.6"	37 cm / 14.6"
	R1MM	1 mm / 40 mil	7.5 cm / 3"	51 cm / 20.1"
<b>UPC / EAN</b>	120010010100	0.33 mm / 13 mil	5.2 cm / 2"	29.5 cm / 11.6"
<b>PDF417</b>	10 mil	0.254 mm / 10 mil	10 cm / 3.9"	17.5 cm / 6.9"
	15 mil	0.381 mm / 15 mil	8 cm / 3.1"	19.5 cm / 7.7"

**Sales**

Toll Free NA: (800) 934-3163  
 Toll in NA : (425) 348-2726  
 Freephone ROW: 00 800 4488 8844  
 Toll ROW : +44 134 435 0296

**OEM Sales**

Phone: (425) 348-2762

**Media Sales**

Phone: (513) 874-5882

**Customer Service and Support**

Toll Free NA: (800) 755-5505  
 Toll in NA : (425) 356-1799



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