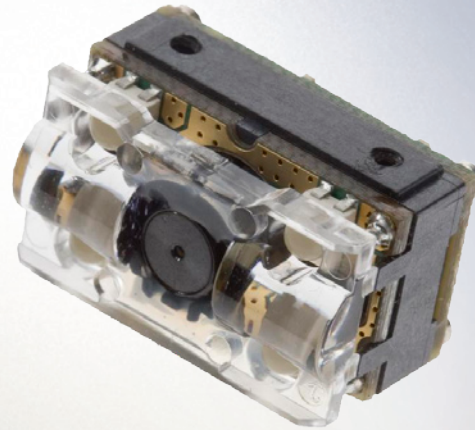


# EA11

Decoded 2D Imager  
Standard Range



- Reads 1D and 2D barcodes omni-directionally – Complies with new industry standards and future proofed
- Best in class scan rate: Up to 60 scan/s (2D) and 200 scans/s (1D) – Insures productivity in intensive use
- Very compact design – available with the industry smallest USB 2.0 decode board, to fit the tightest mechanical constraints
- Plug compatible with Intermec imagers' family (1D & 2D) – leverages and eases your design efforts
- 2 optics are available, standard and high-density – meets your customer requirements
- Highly durable design – Built to withstand harsh environments

The EA11 combines decode speed with exceptional motion tolerance to deliver an easy to use scanner with aggressive performance. Based on state-of-the-art CMOS technology & Intermec advanced decoding its scanning speed is twice as fast as traditional 2-D imagers. Using the latest Intermec algorithms, the EA11 decodes down to one pixel per dot, providing an outstanding decode performance even on poorly printed or damaged barcodes. In addition, the EA11 offers uncompromised performance on linear barcodes by delivering very high scan rates (up to 200 scans per second), more than five times faster than traditional 2-D imagers.

Everything has been done to simplify the integration of the EA11 engine: Compact size, multiple mounting possibilities, low power operation, high speed USB 2.0 & RS232 standard interfaces. The EA11 is compatible with other Intermec decoded engines enabling an easy transition from linear to bi-dimensional scan engines. It allows end users to leverage their integration efforts across multiple OEM

product platforms, reducing time to market and insuring easier product migration. To ease the mechanical integration into a large variety of host devices, the EA11 is available either as an integral engine or separated engine and decode board. The EA11 is available with two options on decode platforms. The ED30 for standard performance, simple interface and most economical. The ED40 where applications, interfaces and performance are more demanding. ED40 is the smallest USB 2.0 decode board in the industry: It not only increases decoding performances but also support applications such as video and image capture.

The EA11 is built to match the most demanding scanning requirements, providing consistent scanning performance in total darkness to full sunshine and over a large temperature range.

The EA11 is based on solid state technology and complies with the most stringent standards for exposure to shock and vibration.

### Physical Characteristics

**Scan engine:** 20.9 mm W x 14.0 mm D x 12.4 mm H  
(.8 in W x .55 in D x .5 in H)  
**Decode board (ED40):** 34 mm W x 19 mm D x 5.6 mm H  
(1.34 in W x .75 in D x .22 in)  
**Weight:** 10g  
*Mounting of the scan engine on the decode board  
(bracket mounted) is optional*

### Scanning Performances

**Scan Rate:** 2D mode: 56 images/s auto adaptive  
**Linear emulation mode:** 200 scans/s auto adaptive  
**Scan angle:** 38.9° (Horizontal), 25.4° (Vertical)  
**Optical resolution:** 752 (H) x 480 (V) pixels,  
256 gray levels  
**Print Contrast:** down to 25%  
**Versions:** Standard range and high density

### Symbologies

**1D symbologies:** EAN/UPC, GS1 Databar (limited expanded & omni-directional), 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, postal codes (Australian Post, BPO, Canada Post, Dutch Post, Japan Post, PostNet, Sweden Post)  
**2D symbologies:** Data Matrix, PDF417, Micro PDF 417, Codablock Maxicode, QR, Aztec GS1 composite codes

### Interfaces

High speed USB 2.0, RS232 TTL with Intermec Scanner Control Protocol (ISCP)

### Connection

**Optics to decode board:** 21 contact ZIF connector, pitch 0.3mm/0.12 in.  
**Decode board to host:** 12 pin ZIF connector, pitch 0.5 mm/0.2 in.

### Electrical Characteristics

#### Optics, typical values:

**Voltage:** 3.3V -5%/+10%  
**Operating current:** 170mA - 310mA  
(lighting condition dependent)

#### Optics + decode board, typical values:

**Voltage:** 3V to 5.5V  
**Operating current:** decode board & voltage dependent;  
*refer to the ED30 & ED40 Integration Guides for detailed information*  
**Power saving mode:** 2mA

### Environmental Characteristics

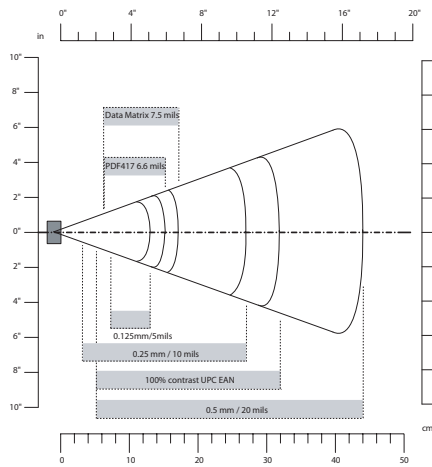
**Ambient light:** Works in any lighting conditions, from 0 to 100 000 lux  
**Operating temperature:** -20° to 60° C (-4° to 140° F)  
**Storage temperature:** -30° to 70° C (-22° to 158° F)  
**Relative humidity:** 5% to 95% (non-condensing)  
**Shock:** 2000G, 0.7ms, half sinus, 3 axes  
**Vibration:** 8G r.m.s., from 10Hz to 500Hz, 2 hours/axis, 3 axes

### Regulatory Approvals

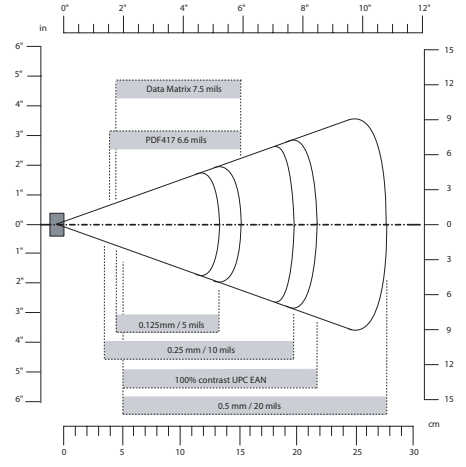
UL recognized component, VDE certified, RoHS Compliant

### Typical reading distances

#### EA11 Standard Optics



#### EA11 High Density Optics



#### North America

##### Corporate Headquarters

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

#### North Latin America

##### Headquarters Office

Mexico  
Phone: +52 55 52-41-48-00  
Fax: +52 55 52-11-81-21

#### South Latin America

##### Headquarters Office

Brazil  
Phone: +55 11 5502.6770  
Fax: +55 11 5502.6780

#### 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

#### 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



Copyright © 2010 Intermec Technologies Corporation. All rights reserved. Intermec is a registered trademark of Intermec Technologies Corporation. All other trademarks are the property of their respective owners. Printed in the U.S.A. 612058-01A 06/10

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