

MINDEO



1D 2D



ES360 Embedded Image Scanner

Features



- 1 Compact design and plug-and-play interfaces allow easy integration into different host devices
- 2 Read all common 1D/2D barcodes from paper labels and electronic screens
- 3 Megapixel image delivers better performance in decoding hard-to-read barcodes
- 4 Advanced image induction technology ensures rapid induction of barcodes, even through a transparent lens in front of the scanning window

Mechanical & Electrical Characteristics

Dimensions	L × W × H: 37.4 mm × 35.2 mm × 17.6 mm
Weight	38 g (without cable)
Case Material	Zinc alloy
Cable	Straight 2.0 m
Interface Supported	RS-232, USB, USB virtual COM
Indicator Interface	Beeper
Exit Window Material	Tempered glass
Trigger Mode	Hand-held, Auto-detect, Command
Programming Method	Scanning special barcodes in sequence, or sending commands via RS-232 interface
Firmware Upgrade	Online
Input Voltage	5±0.25 V
Current	Standby: 136 mA Scanning: 250 mA(Typiac), 500 mA(Maximum)

Performance Characteristics

Image Size	1280 × 800 pixels
Light Source	Illumination: 2700K , white LED Aiming: 617 nm peak wavelength, red LED
Scanner Field of View	Horizontal: 41°, Vertical: 28°
Scanning Angles	± 70°, ± 75°, 360° (Skew, Pitch, Roll)
Print Contrast	20% minimum reflective difference
Decoding Capability	All common 1D/2D barcodes
Minimum Resolution	HD: 1D (Code 39): 3 mil SR: 1D (Code 128): 4 mil

	High Density Series	Standard Range Series
Decoding Depth	3 mil Code 39 (3 chars)	/
	4 mil Code 128 (3 chars)	63 – 120 mm
	13 mil UPC (6 chars)	23 – 285 mm
	6.7 mil PDF417 (20 chars)	23 – 157 mm
	10 mil QR (20 chars)	12 – 170 mm
	10 mil DM (20 chars)	12 – 178 mm
	20 mil QR (20 chars)	39 – 290 mm

Environmental Characteristics

Temperature	Operating: -10 °C to 50 °C (14 °F to 122 °F); Storage: -20 °C to 70 °C (- 4 °F to 158 °F)
Humidity	5% to 95% (non-condensing)
Mechanical Vibration	IEC60064-2-6: Un-powered scanner withstands a random vibration along each of the X, Y and Z axes for a period of one hour per axis, define as follows: 20 Hz to 80 Hz Ramp up to 0.04 G ² /Hz at the rate of 3 dB/oct 80 Hz to 350 Hz 0.04 G ² /Hz 350 Hz to 2000 Hz Ramp down at the rate of 3 dB/oct
Mechanical Shock	IEC60064-2-27: Shock pulse: 0.5 ms, Maximal acceleration: 1500 G, Shock direction & time: ± X-axis, ± Y-axis, ± Z-axis, 3 times for each direction, total of 18 times.
Safety	Photobiological Safety: EN62471:2008 EMC: EN55032, EN55035 ESD Protection: Contact discharge: ± 4 KV, air discharge: ± 8 KV Sealing: IP52 Drop Resistance: Withstands multiple 1.5 m (5 ft.) drops to concrete RF Immunity: IEC61000-4-3, 10 V/m Artificial Light Immunity: 100,000 Lux