F-31

2D CMOS Imager Scanner

Highlights

- 2D CMOS imager with auto-focus technology

- Rapidly scans and decodes a wide variety of 1D or 2D barcodes at 80 frames per second (FPS)

- Laser ranging method plus the high-speed CMOS image sensor enables high speed autofocusing

- Custom configuration capabilities

- Complete unit with integrated decoder

- Durable—survives 2.5 foot drop to concrete

- IP42 rating against dust and moisture

- Communication interface: USB or RS232

- Dimensions: 1.81" x 0.98" x 2.28" (WxLxD)

- Backed by a two year warranty

≡ OPTICON

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Product Specifications

OPERATING INDICATORS

VISUAL: 1 LED (red/green/orange)
AUDIBLE: Buzzer

COMMUNICATION

USB: Version 1.1, VCP, USB-A connector

POWER

VOLTAGE REQUIREMENT: 5V ± 10%
CURRENT CONSUMPTION: Maximum 195mA

2D IMAGER OPTICS

LIGHT SOURCE: Aiming laser diode, illumination LEDs
SCAN METHOD: CMOS area sensor, 900 x 512 pixels, gray scale
SCAN RATE: Up to 80 fps, after auto-focus activation (100 ms after triggering)
IMAGE FORMAT: Bitmap, JPEG
READING PITCH ANGLE: -50 to 0°, 0 to +50°
READING SKEW ANGLE: -50 to 0°, 0 to +50°
READING TILT ANGLE: 360°
MINIMUM RESOLUTION AT PCS 0.9: 5 mil (0.127 mm)
MINIMUM PCS VALUE: 0.45
FIELD OF VIEW: Horizontal 40°, Vertical 23°
DEPTH OF FIELD:

At QR Code:
5 mil (0.127 mm) 1.77 - 2.56 in (45 - 65 mm)
15 mil (0.381mm) 1.77 - 9.84 in (45 - 250 mm)

At Code 39:
5 mil (0.127 mm) 1.77 - 4.33 in (45 - 110 mm)
10 mil (0.254 mm) 1.97 - 10.24 in (50 - 260 mm)
39 mil (1.0 mm) 4.72 - 39.37 in (120 - 1000 mm)

SUPPORTED SYMBOLOGIES

BARCODE (1:D): JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 11, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 DataBar (RSS), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISSN-ISMN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey

BARCODE (2:D): Aztec Code, Aztec Runes, Chinese Sensible code, Codablock F, Composite codes, Data Matrix (ECC200/EC0-140), Maxi Code (mode 2~5), MicroPDF417, Micro QR Code, PDF417, QR code

BARCODE (POSTAL CODES): Chinese Post, Intelligent Mail Barcode, Korean Postal Authority code, POSTNET

DURABILITY

TEMPERATURE:
Operation: 32 to 113 °F (0 to 45 ℃)
Storage: -4 to 140 °F (-20 to 60 °C)

HUMIDITY:
Operation: 20 - 85% (non-condensing)
Storage: 20 - 90% (non-condensing

AMBIENT LIGHT IMMUNITY:
Fluorescent: 10,000 lx max
Direct sun: 100,000 lx max
Incandescent: 10,000 lx max

ANTISTATIC ELECTRICITY: 15kV (non-destructive)

DROP TEST: 2.5 ft (0.75 m) drop onto concrete surface

PROTECTION RATE: IP 42

PHYSICAL

DIMENSIONS (WXHXD): 1.81 x 0.98 x 2.28 in (46 x 25 x 58 mm)
WEIGHT BODY: Ca. 1.8 oz (50 g) (excl. cable)
CASE: ABS, Black

REGULATORY AND SAFETY

PRODUCT COMPLIANCE: CE, FCC, VCCI, RoHS, IEC 60825-1 Class 2, FDA CDRH Class II