

PX300 SERIES

Industrial Barcode Scanner
with AI Decoding Engine

Optimized for dirty, distorted, reflective and low-contrast barcodes

Read rate $\geq 99.99\%$

- ◆ 1280 × 960 global shutter, up to 60 FPS
- ◆ Red / blue lighting, red crosshair aiming
- ◆ HD minimum 1D resolution: 3 mil
- ◆ Bluetooth 5.0, 50 m in open areas
- ◆ Wireless: 8 h continuous / 15 h intermittent
- ◆ IP52 protection, 1.5 m drops (50 times)



Wired · side view



Wired · front view



Wireless + base

Product images are illustrative renderings. Refer to the actual product for appearance details.

IP52

Industrial protection

1.5m

50 drops

3000 mAh

Wireless battery

USB/ES/RS232

Connection options

Versatile interfaces and low power for automated production lines and warehouse logistics

Wireless: one scan every 10 s for intermittent operation; 50 m in open areas. Read rate is nominal, as stated in existing product literature; actual performance depends on barcode quality and operating conditions.

Product Features

Efficient, reliable barcode reading

Proprietary algorithms decode dirty, distorted, reflective and low-contrast barcodes, providing reliable data capture for industrial traceability.

Flexible lighting and precise aiming

Red / blue direct and red diffuse light suit varied materials and backgrounds.

Red laser crosshair aiming enables quick barcode targeting.

Extended wireless operation

3000 mAh battery: 8 h continuous / 15 h intermittent scanning.

(One scan every 10 s.) Bluetooth range: 50 m in open areas.



3C assembly and traceability



New-energy battery production traceability



Warehouse logistics

Technical Specifications

Configuration	PX300-U Wired USB	PX300-ES Wired	PX300-B + U base	PX300-B + ES base
Symbologies	2D: DataMatrix (ECC200), QR Code, GS1-DM, GS1-QR, PDF417 1D: Code39, Code93, Code128, EAN13, EAN8, UPC-A, UPC-E, Interleaved 2 of 5			
Sensor / frame rate	1280 × 960 global shutter CMOS. Maximum capture frame rate: 60 FPS			
Optics	Pixel size: 3.0 μm. Sensor format: 1/4 inch. Lens: 4.7 mm			
FOV / reading angles	FOV: horizontal 40° / vertical 30°. Pitch ±60°, skew ±60°, rotation 360°			
Contrast / resolution	Symbol contrast: 20%. Minimum: SR 5 mil. HD 1D: 3 mil / 2D: 5 mil			
Typical depth of field (mm)	SR DM 10 mil: 10-200; DM 20 mil: 10-390 QR 10 mil: 10-215; QR 20 mil: 10-390 Code128 5 mil: 40-170; 10 mil: 30-330		HD DM 5 mil: 20-65; DM 10 mil: 5-115 QR 5 mil: 20-65; QR 10 mil: 5-115 Code128 3 mil: 25-70; 10 mil: 20-155	
Bluetooth / range	-	-	BT 5.0 / BLE, 2.4-2.4835 GHz 50 m in open areas	
Host interface	USB	100 Mbps Ethernet, RS232	USB	100 Mbps Ethernet, RS232
Protocols	USB HID / CDC	TCP/IP, EIP, PN, Modbus TCP, MC, RS232	USB HID / CDC	TCP/IP, EIP, PN, Modbus TCP, MC, RS232
Battery / runtime	-	-	3000 mAh. 8 h continuous / 15 h intermittent (one scan every 10 s)	
Charging (power off)	-	-	USB 2.0 (5 V, 0.5 A): approx. 7 h DC 12 V (1 A): approx. 4 h	
Power supply	USB 5 V DC 12-24 V (optional)	DC 12-24 V	Scanner: 3.8 V battery Base: USB 5 V DC 12-24 V (optional)	Scanner: 3.8 V battery Base: DC 12-24 V
Max. power	2 W @ USB 5 V	2 W @ DC 12-24 V	Scanner: 2 W @ 3.8 V DC. Base: 6.5 W @ DC 12-24 V	
Ambient / lighting	10-100000 Lux. Direct illumination: switchable red / blue. Diffuse illumination: red			
Aiming / feedback	Red laser crosshair aiming. RGB indicator and buzzer			
Protection / durability	IP52. 1.5 m drops (50 times). Button life: 100000 actuations			
Temperatures	Operating: -10°C to +45°C. Charging (wireless model): 0°C to +40°C. Storage: -30°C to +70°C			
Humidity / certification	20%-80% RH, non-condensing. CE, FCC, RoHS			

Models: PX300-U2F5SRDRB / PX300-U2F5HDDR; PX300-ES2F5SRDRB / PX300-ES2F5HDDR.
PX300-B2F5SRDRB / PX300-B2F5HDDR. Bases: PX300-BASE-BT-01-U / PX300-BASE-BT-01-ES.

Confirm models and optional configurations when ordering. Depth of field, runtime and wireless range depend on operating conditions.
Application images are illustrative.