

TPH9710P

Wired Handheld Code Reader



Introduction

TPH9710P wired handheld code reader decodes different types of 1D and 2D codes rapidly in different distances. With the built-in intelligent code reading algorithm, it can easily decoding codes with spots, defects and low contrast ratio, and entry level DPM codes. It adopts illumination system to provide direct lighting and diffused reflection lighting.

Key Feature

- Built-in code reading algorithm for decoding different types of codes.
- Provides good robustness to read codes with spots, defects and low contrast ratio.
- Supports continuous code reading, batch code reading for improving code reading efficiency.
- Adopts illumination system to provide direct lighting and diffused reflection lighting.
- Easy to replace components.
- IP65 and drop height of 2.0 m.

Available Model

- Standard distance, with network interface: TPH9710P/10SR/07RN/L
- Standard distance, with USB interface: TPH9710P/10SR/07RN/U
- Standard distance, with network interface and PoE power supply: TPH9710P/10SR/07RN/LP
- Near distance, with network interface: TPH9710P/10NR/07RN/L
- Near distance, with USB interface: TPH9710P/10NR/07RN/U
- Near distance, with network interface and PoE power supply: TPH9710P/10NR/07RN/LP
- Far distance, with USB interface: TPH9710P/10ER/12RN/U
- Far distance, with network interface: TPH9710P/10ER/12RN/L

Applicable Industry

PCB, new energy, consumer electronics, semiconductor, automobile parts, etc.

Specification

Model	TPH9710P/10NR/07RN/L(U/LP)		TPH9710P/10SR/07RN/L(U/LP)
Performance			
Symbologies	1D codes: Code 39, Code 93, Code 128, GS1-Code128, CodaBar, EAN 8, EAN 13, ISBN, ISSN, ITF 25, ITF 14, UPCA, UPCE 2D matrix codes: QR Code, Data Matrix, MicroQR, Aztec, Han Xin Stacked code: PDF417		
Min. accuracy	3 mil		
Sensor type	CMOS		
Resolution	1280 × 800		
Depth of field*	Code 39 (3 mil): 15 mm to 60 mm Code 39 (5 mil): 5 mm to 80 mm Data Matrix (5 mil): 10 mm to 70 mm Data Matrix (10 mil): 0 mm to 110 mm ¹ QR Code (5 mil): 10 mm to 70 mm	Code 39 (5 mil): 30 mm to 200 mm Code 128 (3 mil): 55 mm to 110 mm Code 128 (20 mil): 56 mm to 660 mm Data Matrix (10 mil): 20 mm to 220 mm QR Code (10 mil): 20 mm to 220 mm QR Code (20 mil): 10 mm to 450 mm	
Field of view	Horizontal 31°, vertical 20°		
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°		
Symbol contrast	20%		
Communication protocol	Network interface: SmartSDK, TCP Client, TCP Server, FTP, Profinet, Ethernet/IP, Modbus, UDP, Serial, FINS, Melsec/SLMP USB interface: SmartSDK, USB (HID/CDC), Serial		
Electrical feature			
Data interface	Network interface: Fast Ethernet (100 Mbit/s), RS-232, DC terminal USB interface: USB 2.0, DC terminal, RS-232		
Power supply	Network interface: 12 VDC USB interface: USB 2.0: 5 VDC; DC terminal: 12 VDC		
Current consumption	USB 2.0: 0.9 A (max.), 0.5 A (typical) DC terminal: 0.5 A (max.), 0.28 A (typical)		
Mechanical			
Focal length	6.7 mm		
Ambient illumination	0 lux to 100000 lux		
Light source	Direct lighting: white LED Diffused reflection lighting: red LED		
Aiming system	Cross laser aiming		
Dimension	73.4 mm × 104 mm × 229.5 mm (2.9" × 4.1" × 9.0")		
Weight	Approx. 460 g (1.0 lb.)		
Ingress protection	IP65		
Temperature	Working temperature: −10 °C to 50 °C (14 °F to 122 °F) Storage temperature: −20 °C to 60 °C (−4 °F to 140 °F)		
Humidity	20% RH to 95% RH (no condensation)		
Drop height	2.0 m		
General			
Client software	IDMVS		
Certification	CE, KC		

*Test condition: Environment temperature=25 °C (77 °F), ambient illumination=250 lux filament lamp, Hikrobot's test symbologies are used.

1: 0 mm means that the codes can be read within the imaging field of view.

Model	TPH9710P/10ER/12RN/U		TPH9710P/10ER/12RN/L
Performance			
Symbologies	1D codes: Code 39, Code 93, Code 128, GS1-Code128, CodaBar, EAN 8, EAN 13, ISBN, ISSN, ITF 25, ITF 14, UPCA, UPCE 2D matrix codes: QR Code, Data Matrix, MicroQR, Aztec, Han Xin Stacked code: PDF417		
Min. accuracy	10 mil		
Sensor type	CMOS		
Resolution	1280 × 800		
Depth of field*	Code 39 (10 mil): 540 mm to 1200 mm Code 39 (20 mil): * mm to 2800 mm ¹ Code 39 (50 mil): * mm to 5200 mm ¹ Code 39 (100 mil): * to 6800 mm ¹ Code 128 (10 mil): 650 mm to 1000 mm Code 128 (20 mil): * mm to 2800 mm ¹ Code 128 (100 mil): * mm to 6800 mm ¹ Data Matrix (50 mil): * mm to 4000 mm ¹ QR Code (20 mil): 600 mm to 1600 mm QR Code (33 mil): 250 mm to 2600 mm QR Code (100 mil): * to 6500 mm ¹		
Field of view	Horizontal 18°, vertical 10°		
Detection angle	Tilt angle ± 60°, skew angle ± 60°, rotation angle 360°		
Symbol contrast	20%		
Communication protocol	SmartSDK, USB (HID/CDC), Serial	SmartSDK, TCP Client, TCP Server, FTP, Profinet, Ethernet/IP, Modbus, UDP, Serial, FINS, Melsec/SLMP	
Electrical feature			
Data interface	USB 2.0, DC terminal, RS-232	Fast Ethernet (100 Mbit/s), RS-232, DC terminal	
Power supply	USB 2.0: 5 VDC; DC terminal: 12 VDC	12 VDC	
Current consumption	USB 2.0: 0.9 A (max.), 0.5 A (typical) DC terminal: 0.5 A (max.), 0.28 A (typical)	0.5 A (max.), 0.28 A (typical)	
Mechanical			
Focal length	12 mm		
Ambient illumination	0 lux to 100000 lux		
Light source	Direct lighting: white LED; diffused reflection lighting: red LED		
Aiming system	Point laser aiming		
Dimension	73.4 mm × 104 mm × 229.5 mm (2.9" × 4.1" × 9.0")		
Weight	Approx. 460 g (1.0 lb.)		
Ingress protection	IP65		
Temperature	Working temperature: -10 °C to 50 °C (14 °F to 122 °F) Storage temperature: -20 °C to 60 °C (-4 °F to 140 °F)		
Humidity	20% RH to 95% RH (no condensation)		
Drop height	2.0 m		
General			
Client software	IDMVS		
Certification	CE, KC		

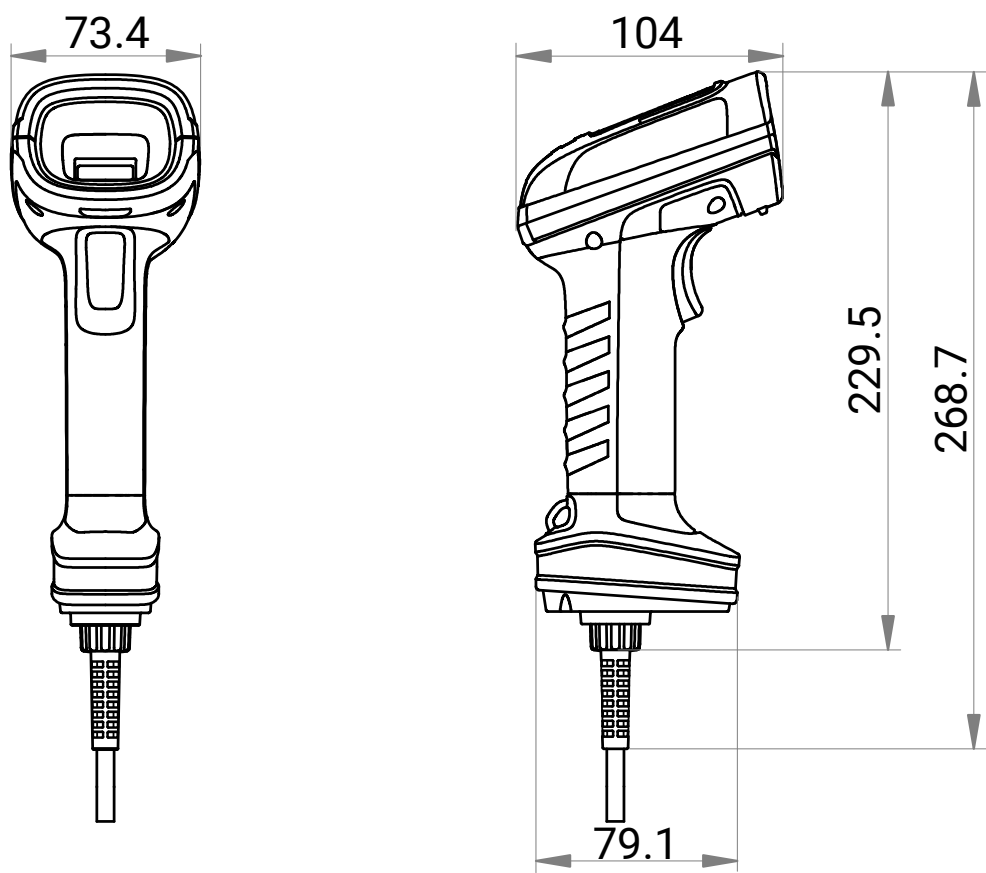
*Test condition: Environment temperature=25 °C (77 °F), ambient illumination=250 lux filament lamp, Hikrobot's test symbologies are used.

1: It is determined by the code length and detection angle.

Laser Information of TPH9710P Series Product

Laser safety class	Laser 2
Wavelength	650 nm
Pulse width	8 ms
Maximum power	1 mW

Dimension



Unit: mm