

# PV10M

## Near-infrared Palm Data Capture Module



PV10M is a touchless module for capturing palm and vein features. It uses a near-infrared fill light, a wide dynamic image sensor, and an aspherical distortion-free camera optical system. It can capture palm and vein images under the palm skin, offering excellent anti-spoofing performance.

There is a built-in high-performance low-power-consumption processor with the frequency up to 400MHz, a USB interface for power supply and communication, supporting a mainstream operating system.

Combined with the ZKPalm SDK, customer can easily develop palm recognition system.

### Features

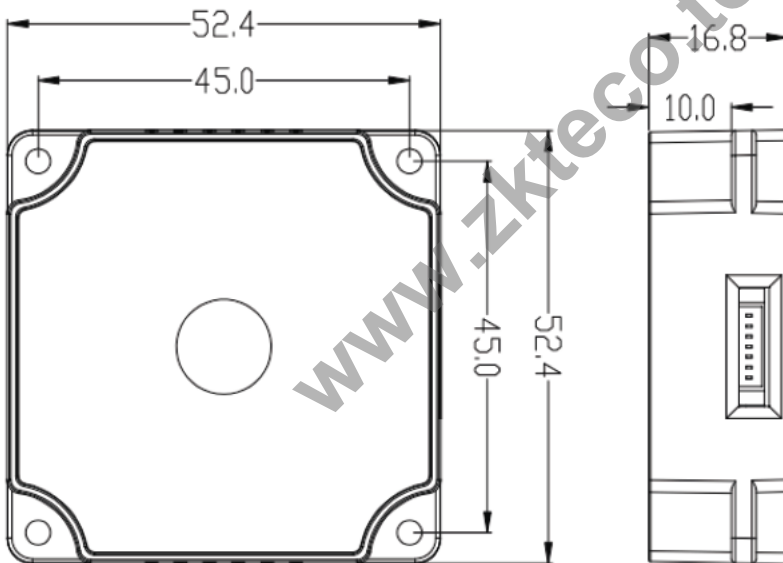
- Touchless technology with small size, and easy to integrate
- Built-in distance detection sensor, effectively reduces standby power consumption
- Wide dynamic image sensor to adapt ambient light in a wide range
- Palm recognition range from 20cm to 35cm
- Capturing high-quality palm images even when the palm is dry or wet

### Specifications

|        |                   |                                   |
|--------|-------------------|-----------------------------------|
| Sensor | Grayscale         | 256 levels                        |
|        | Image Size        | 480 * 640                         |
|        | Distortion Rate   | <1%                               |
| H/W    | Connector         | 7-pin 1.25mm USB 2.0              |
|        | Power Consumption | 0.5W (Standby) / 1.5W (Operating) |
|        | Interface         | USB 2.0 (High speed)              |

|                |                      |   |
|----------------|----------------------|---|
| H/W            | Power Requirements   | USB 5V  |
|                | Temperature          | -10°C ~ 45°C / 14°F ~ 113°F                   |
|                | Humidity             | 0 ~ 90% RH                                    |
|                | Lighting Environment | Enrollment <800Lux; Authentication <2000Lux   |
|                | Dimensions (L*W*H)   | 52.4 * 52.4 * 16.8mm (±1 mm)                  |
| OS             | Windows              | Windows XP / Windows 7 / Windows10 (32/64bit) |
|                | Android              | Android 4.1 or higher                         |
| ZKPalm SDK     | Recognition Angle    | Roll ± 60°, Pitch ± 30°                       |
|                | Recognition Method   | 1:1, 1:N                                      |
|                | Capacity             | 6,000 templates                               |
|                | Accuracy             | FRR=0.68% when FAR=0.001%                     |
|                | Recognition Time     | <300ms (Quad-core Cortex-A9 up to 1.6GHz)     |
| Certifications | CE, FCC, RoHS        |   |

## Dimension (mm)



| Connector pinout<br>(7pin 1.25mm) |            |
|-----------------------------------|------------|
| Pin 1                             | +5 V       |
| Pin 2                             | GND        |
| Pin 3                             | Shield GND |
| Pin 4                             | USB D-     |
| Pin 5                             | USB D+     |
| Pin 6                             | Reserved   |
| Pin 7                             | Reserved   |

