

# UROVO DT50P – UHF RFID

## Specifications



## SPECIFICATION

|                      |                        |                                                                                                                                                                                                                                                                       |
|----------------------|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Performance          | <i>Model</i>           | DT50P-UHF RFID                                                                                                                                                                                                                                                        |
|                      | <i>O.S</i>             | Android 13.0 (AER)                                                                                                                                                                                                                                                    |
|                      | <i>Processor</i>       | Qualcomm Octa-Core 2.45GHz (64bit)                                                                                                                                                                                                                                    |
|                      | <i>Memory</i>          | RAM : 4 GB, ROM : 64 GB                                                                                                                                                                                                                                               |
|                      | <i>Extended Memory</i> | Micro SD card, Up to 256 GB                                                                                                                                                                                                                                           |
| Basic Specifications | <i>Dimensions</i>      | 169 x 90.5 x 143.3 (mm) (D x W x H)                                                                                                                                                                                                                                   |
|                      | <i>Weight</i>          | 678 g                                                                                                                                                                                                                                                                 |
|                      | <i>Display</i>         | 5.7 inch display, resolution : 1440 x 720 pixels<br>IPS HD screen                                                                                                                                                                                                     |
|                      | <i>Touch Screen</i>    | Ultra sensitive capacitive touch panel, support multi-touch, wet-fingers operation, glove mode and one-hand operation (interface display)                                                                                                                             |
|                      | <i>Main Battery</i>    | Capacity : 3.85V – 9.000 mAh (Removable main battery)<br>Standby : up to 490 hours<br>Continuous use : over 12 hours (depending on user environment)<br>Charging time : ≤ 3.5 hours (charge device by standard adaptor 9V2A and USB cable) (Battery from 20% to 100%) |
|                      | <i>RTC</i>             | The system time could be backed up for 10 minutes after the battery is removed                                                                                                                                                                                        |
|                      | <i>Audio</i>           | Dual-Microphone (noise cancellation), Speaker (1.5W, 100dB @10 cm), Receiver, 3.5mm audio jack                                                                                                                                                                        |
|                      | <i>Buttons</i>         | PWR button, Vol +/- button, Scan button x 2, Custom button                                                                                                                                                                                                            |
|                      | <i>Notifications</i>   | Audible tone; multi-color LED; vibration                                                                                                                                                                                                                              |
|                      | <i>Camera</i>          | Front 5 MP, Rear 13 MP with Flash                                                                                                                                                                                                                                     |
|                      | <i>Sensors</i>         | Light + Accelerator + Proximity + Geomagnetic + Gyro                                                                                                                                                                                                                  |

|                     |                        |                                                                                                                                       |
|---------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|                     | <i>Scanning</i>        | Professional scan engine<br>Support international standard 1D/2D barcode;<br>Support barcode displayed on screen and colored barcode; |
|                     | <i>Slots</i>           | Micro SD/TF x 1, Nano – SIM x 2                                                                                                       |
|                     | <i>Interfaces</i>      | USB Type C x 1 – Support OTG;<br>USB 3.1 communication speed<br>Bottom pogo pin x 2, Back pogo pin x 9                                |
|                     | <i>Charging Method</i> | Type C charging, support 9V2A Quick Charge 3.0                                                                                        |
| Network Connections | <i>WWAN</i>            | 2G/ 3G/ 4G<br>Dual – SIM, Dual – Standby                                                                                              |
|                     | <i>Bluetooth</i>       | BT 5.0 + BR/EDR + BLE                                                                                                                 |
|                     | <i>Wifi</i>            | 2.4GHz/ 5GHz, IEEE 802.11<br>a/b/g/n/ac/d/e/h/i/k/r/v/w<br>802.11 ax ready (Wifi 6)<br>Roaming : 802.11r/ OKC/ PMKID caching          |
|                     | <i>NFC</i>             | RFID 13.56MHz, ISO15693, ISO14443A/B,<br>Mifare, Felica                                                                               |
|                     | <i>Positioning</i>     | GPS, A-GPS, BeiDou, GLONASS, Galileo                                                                                                  |
| Environment         | <i>Operating Temp</i>  | -20°C to 60°C.                                                                                                                        |
|                     | <i>Storage Temp</i>    | -40°C to 70°C.                                                                                                                        |
|                     | <i>Humidity</i>        | 5%RH ~ 95%RH (No condensation)                                                                                                        |
|                     | <i>Drop</i>            | Multiple 1.5 (m) drops to concrete at room temperature                                                                                |
|                     | <i>Sealing</i>         | IP67                                                                                                                                  |
|                     | <i>ESD</i>             | +/- 15kv Air<br>+/- 8kv Contact                                                                                                       |

## DATA CAPTURE SPECIFICATIONS

### 1) Camera :

| Rear Camera  |                                               |
|--------------|-----------------------------------------------|
| Functions    | Flash light (700 mA), Auto Focus, Video, PDAF |
| Pixels       | 13 MP                                         |
| Front Camera |                                               |
| Pixels       | 5 MP, Fixed Focus                             |

### 2) Scan Engine :

| Scan Engine Specifications |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Scan Angle Tilt            | 360°                                                                                                                              |
| Scan Angle Pitch           | +/- 60°                                                                                                                           |
| Scan Angle Skew            | +/- 45°                                                                                                                           |
| Laser Type                 | Class II                                                                                                                          |
| Fill – in Light            | White LED, Soft Light                                                                                                             |
| Barcodes Support           |                                                                                                                                   |
| 1D Symbolologies           | UPC, EAN-8, EAN-13, Code128, Code39, Code93, Code11, Interleaved 2 of 5, Discrete 2 of 5, Chinese 2 of 5, Codabar, MSI, RSS, etc. |
| Scanning Accuracy (1D)     | ≥ 3.3 (mil) (for Code 128, EAN-13, v...v...)                                                                                      |
| Distance Scan (1D)         | ≥ 20 (cm) (for Code 128, EAN-13, v...v...)                                                                                        |

|                        |                                                                                                                                                                                                            |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2D Symbologies         | PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode; Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal, Dutch Postal (KIX),etc. |
| Scanning Accuracy (2D) | $\leq 1 \text{ (cm)} \times 1 \text{ (cm)}$                                                                                                                                                                |
| Distance Scan (2D)     | $\geq 20 \text{ (cm)}$ (for QRcode, Datamatrix, v...v...)                                                                                                                                                  |
| Motion Error Tolerance | 5m/s                                                                                                                                                                                                       |
| Scan Time Identifier   | 0.1s                                                                                                                                                                                                       |
| <b>Mode Triggering</b> |                                                                                                                                                                                                            |
| Triggering Modes       | Trigger Release or Time Out Mode<br>Continuous Trigger Mode<br>Trigger Aiming & Loose for Scanning Mode<br>Decode or Time Out Mode                                                                         |

### 3) RFID (HF) :

|                   |                                                            |
|-------------------|------------------------------------------------------------|
| <b>RFID (HF)</b>  |                                                            |
| Protocol          | ISO15693, ISO14443 A/B, Mifare, Felica                     |
| Frequency         | 13.56 MHz                                                  |
| Mode              | Card Emulation, Peer to Peer, Reader                       |
| Reading Range     | Read distance 0 – 6 (cm) (ISO15693), 0 – 4 (cm) (ISO14443) |
| <b>RFID (UHF)</b> |                                                            |

|                    |                                                                |
|--------------------|----------------------------------------------------------------|
| RFID chip          | Impinj E710                                                    |
| Frequency Range    | 865 – 868MHz, 902 – 928MHz                                     |
| Standards Support  | EPC Global Class 1 Gen2/ISO 1800-6C                            |
| Nominal Read Range | Up to 20 (m) (depends on RFID tags, adjustable 0.1 (m) to Max) |
| Antenna            | Circular Polarization Antenna                                  |
| RFID Antenna Gain  | 5dBi                                                           |

## NETWORK CONNECTIONS

### 1) Positioning :

| Positioning Specification |                                                                                           |
|---------------------------|-------------------------------------------------------------------------------------------|
| Mode                      | GPS, A-GPS, BEIDOU, GLONASS, GALILEO                                                      |
| Frequency                 | GPS (L1), Beidou (B1 1.561GHz), Glonass (L1 1.602GHz), Galileo (E1 1.589GHz/ E2 1.561GHz) |
| Cold Start Time           | Less than 40s                                                                             |
| Max Channel               | 31 Channel                                                                                |
| Sensitivity               | - 130 dB (SNR value 40dBHz)                                                               |
| Accuracy                  | 5 – 10 (m) (open space)                                                                   |

### 2) Wireless WAN

| WAN Specifications |                            |
|--------------------|----------------------------|
| Mode               | Dual – SIM, Dual - Standby |

|                                   |                                              |                                                                                                                       |
|-----------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| Frequency Band<br>(Worldwide)     | 4G (TD-LTE)<br>4G (FDD-LTE)                  | TE-LTE (B34, B38, B39,<br>B40, B41)<br>FDD-LTE (B1, B2, B3, B4,<br>B5, B6, B7, B8, B12, B13,<br>B17, B20, B28A, B28B) |
|                                   | 3G (WCDMA)<br>3G (CDMA2000)<br>3G (TD-SCDMA) | WCDMA (B1, B2, B4, B5,<br>B8)<br>TD-SCDMA (B34, B39)<br>CDMA2000 1x EV-DO<br>Rev.A BC0 (800 MHz)                      |
|                                   | 2G (GSM)<br>2G (CDMA)                        | CDMA1x<br>GSM/EDGE/GPRS (850,<br>900, 1800, 1900)                                                                     |
| Frequency Band (Europe &<br>Asia) | 4G (TD-LTE)<br>4G (FDD-LTE)                  | TE-LTE (B34, B38, B39,<br>B40, B41)<br>FDD-LTE (B1, B3, B5, B7,<br>B8, B20)                                           |
|                                   | 3G (WCDMA)<br>3G (CDMA2000)<br>3G (TD-SCDMA) | WCDMA (B1, B2, B4, B5,<br>B8)<br>TD-SCDMA (B34, B39)<br>CDMA2000 1x EV-DO<br>Rev.A BC0 (800 MHz)                      |
|                                   | 2G (GSM)                                     | CDMA1x                                                                                                                |

|  |           |                                      |
|--|-----------|--------------------------------------|
|  | 2G (CDMA) | GSM/EDGE/GPRS (850, 900, 1800, 1900) |
|--|-----------|--------------------------------------|

### 3) Wireless LAN

| WLAN Specification    |                                                                                                                                                                                                |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protocol              | IEEE 802.11 a/b/g/n/ac/d/e/h/i/k/r/v/w<br>2.4GHz/ 5GHz dual band Wi-fi<br>IEEE 802.11 ax ready                                                                                                 |
| Frequency             | 2.4 GHz<br>5 GHz                                                                                                                                                                               |
| Working Channels      | CH1 ~ CH13, CH34 ~ CH140, CH149 ~ CH165, depends on contry (region)                                                                                                                            |
| Security & Encryption | WEP (40 or 104 bit), WPA/WPA2 Personal (TKIP, and AES); WPA3 Personal (SAE)<br>WPA/ WPA2 Enterprise (TKIP and AES); WPA3 Enterprise 192 bit mode (GCMP-256) – EAP – TLS<br>Enhanced Open (OWE) |
| Fast Roaming          | PMID caching<br>Cisco CCKM<br>802.11r (Over – the – Air)<br>OKC, Wifi roaming threshold could be set                                                                                           |



#### 4) Wireless PAN

| Bluetooth Specification |                      |
|-------------------------|----------------------|
| Mode                    | BT5.0 + BR/EDR + BLE |
| Range                   | More than 10 (m)     |

#### ACCESSORIES

|                                       |                                         |
|---------------------------------------|-----------------------------------------|
| Standard Accessories<br>(Replaceable) | Adapter x 1                             |
|                                       | USB Cable – Type C x 1                  |
|                                       | Battery 9.000 mAh x 1                   |
|                                       | Hand – Strap x 1                        |
|                                       | Screen Protector x 1                    |
|                                       | Instructions & Security Information x 1 |