# **PWS-440**

## 3.7" Ultra Rugged Handheld Terminal



#### **Features**

- Marvell PXA310 806MHz; Supports Windows CE6.0
- 3.7" VGA TFT LCD transflective technology
- IP67 rating guarantees total protection against dirt, dust and water
- Certified by MIL-STD-810G and MIL-STD-461F
- Standard 5-way controller and 4 function keys for one-hand operation
- High capacity Li-ion battery provides 6 hours of continuous operation
- Field navigation application with HSDPA (3.5 G), 802.11b/g, Bluetooth and GPS



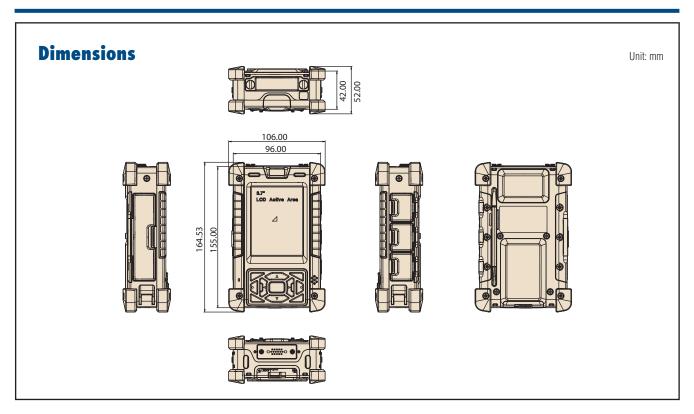


#### Introduction

The PWS-440 is an ultra rugged portable computer featuring a 3.7" transflective VGA TFT LCD display and Marvell PXA310 806MHz processor. With GPS, HSDPA (3.5G), Wi-Fi and built-in Bluetooth, PWS-440 provides a fully-functional communication device for any outdoor application. Certified to meet standard military grade MIL-STD-810G and MIL-STD-461F, PWS-440 is constructed with an IP67 rating guaranteeing total protection against dirt, dust and water. Driven by a high capacity battery, PWS-440 handles a 5-foot drop, and operates in an extreme range of temperatures, providing mobility in any harsh environment. Advantech's PWS-440 is a strong device for reliable mobile communications in any environment.

## **Specifications**

| Processor            | CPU                   | Marvell PXA310 806 MHz   |  |  |
|----------------------|-----------------------|--|--|--|
| OS                   |                       | Windows CE 6.0   |  |  |
| Memory               |                       | 256 MB DDR Mobile RAM on board (default); Up to 512MB DDR (by project-based)   |  |  |
| Storage              |                       | 1 GB NAND Flash on board   |  |  |
| Audio System         |                       | Build-in Internal microphone and one speaker 0.5W  |  |  |
| Display              | Size/ Type            | 3.7" transflective TFT LCD   |  |  |
|                      | Max. Resolution       | VGA 480 x 640  |  |  |
|                      | Brightness (cd/m²)    | 320 cd/m <sup>2</sup> LED back light   |  |  |
| Touch Panel          |                       | 4-wire resistive touch panel   |  |  |
| Application Buttons  |                       | 1 x power on/suspend button<br>Navigation key and four function keys   | 1 x HW reset key located right side door<br>1 x button for backlight on/off (using power on/ suspend button) |  |
| I/O Port             |                       | 2 x USB type A connectors, USB1.1 host<br>1 x USB mini type B connector, USB1.1 Client<br>1 x RS-232<br>1x RS-232 (default) 422/485 (By project-based) | 1 x RJ-45 for 10/100M Ethernet<br>1 x stereo headphone jack<br>1 x microphone jack<br>1 x DC-In connector    |  |
| Communication        | WLAN                  | 802.11b/g WLAN module build in   |  |  |
|                      | Bluetooth             | Bluetooth class 2, v2.1 built-in with integral antenna   |  |  |
|                      | GPS                   | SiRF Star IV high performance GPS chipset  |  |  |
|                      | WWAN                  | Cinterion PH8 HSPA+ WWAN module with high performance external antenna (optional)  |  |  |
| Power                | Battery               | Rechargeable Li-ion smart battery, 7.4 V, 1880 mAh,  | 2S1P   |  |
|                      | DC input              | 12V ± 5%   |  |  |
| Environment          | Operating Temperature | -20° C ~ 60° C   |  |  |
|                      | Storage Temperature   | -40° C ~ 70° C   |  |  |
|                      | Operating Humidity    | 5% ~ 95%   |  |  |
| Rugged Certification |                       | IP67   | MIL-STD-461F   |  |
|                      |                       | 5 feet drop to concrete  | MIL-STD-810G   |  |
| Certifications       |                       | CE, FCC, CCC   |  |  |
| Dimensions & Weight  |                       | 155 x 96 x 42 mm, 650 g  |  |  |



### I/O Connectors



- 1. Function buttons
- Suspend button
  Navigation keys
- 4. FN button

- 5 Enter keys
- 6. Docking/cradle connector7. Battery pack latch



9. RS 232 10. USB type A (USB 1.1 Host) 11. RS 232 (RS422/RS485)



- 12. RJ-45 Port
- 13. Handphone, microphone & micro SD slot
- 14. DC in & min USB type (USB 1.1 slave)

## **Ordering Information**

| Part Number    | Description   |  |  |
|----------------|---|--|--|
| PWS-440-6E000E | PWS-440 with WLAN/BT/GPS/WIN CE6.0                      |  |  |
| PWS-440-6E003E | PWS-440 with WLAN/BT/GPS/3.5G/WIN CE6.0                 |  |  |
| PWS-440-6M000E | PWS-440 with WLAN/BT/GPS/WIN Embedded Handheld 6.5      |  |  |
| PWS-440-6M003E | PWS-440 with WLAN/BT/GPS/3.5G/WIN Embedded Handheld 6.5 |  |  |

Note: The package are include PWS-440 device, power adapter, and hanstrap

#### **Accessories**

| Part Number       | Description                              |
|-------------------|--|
| P37B-91-P37BB-C01 | Accessory P37B 4IN1 battery charger      |
| P37B-91-P37BC-R02 | Accessory P37B cradle                    |
| P37B-93-P37B4-001 | Accessory P37B battery pack 2S1P 1880MAH |
| 1757003914        | Adaptor AC-DC 12V/4A 100-240V            |