

# PM450

## EVERYWHERE SURVIVAL ULTRA-RUGGED HANDHELD TERMINAL

### The terminal what most needed at your harshest warehouse

When you need to do intensive barcode scanning job with mobility at your harshest working environment, PM450 is the right product for you. Even though your consumers always seek for new and cutting-edge technology, your workers have been always selecting the product with the most convenient and user-friendly features to make their job easier and faster. PM450 definitely fulfills these controversial requirements but yet adopts latest technology of enterprise mobility trend for next decade.

### Maximize power and speed with latest micro processor

Adopting latest Cortex A8 @ 1GHz processor from TI (Texas Instrument), PM450 will give you maximum power and speed for your field workforces to conduct any compli-cated job process in the field. PM450 has 512MB RAM memory and 1GB Flash ROM which is enough to run a variety of embedded applications.

### Experience new convenience with new transformable keypad

With 2 different sets of keypad – 32 key Numeric/shifted Alpha & 56 key Full Alpha /Numeric, you will have utmost capability and ease of use at any applications. With Easy Swap function, switching keypad can be done in minutes at service depot.

### Utmost rugged terminal but yet featured as enterprise mobile gadget

PM450 can survive 1.8m (6ft) multiple drop at any operating temperature and at any harsh environment with IP65 rain/dust sealing. Moreover, just like the mobile handset on your hand, PM450 also features 3.9G HSPA+ WWAN, IEEE 802.11 a/b/g/n Wireless LAN and built-in assisted GPS as well as 5 Megapixel color camera with LED flash in order to adapt on both inside- & outside-4-wall applications.

### Truly multiple choices of your automatic data input

PM450 has mid-range 1D Laser, standard range 1D / 2D imager and extra range 1D / 2D imager in order to be counted on any user application and its user tendency.



### Compatible Utilities



PM450 is designed for serving at as many vertical markets as possible: such as transportation, logistics, distribution centers, manufacturing, government, public sectors as so on. As it is truly everywhere survival product in your field, with PM450, you can count on your workers completely without any error input or delay. Moreover, you can completely drop off hassles with less down time and low total cost ownership.

 Cortex 1GHz	 512MB/1GB	 WEH 6.5 WIN CE 6.0 ANDROID 4.2	 DAYLIGHT READABLE	 32 KEY 56 KEY	 KEY SWAP	 3.9G HSPA+	 802.11 a/b/g/n
 LASER	 IMAGER	 LONG RANGE	 5M CAMERA	 BLUETOOTH	 GUN HANDLE	 IP65	 1.8M (6ft)

# PM450

## PHYSICAL CHARACTERISTICS

### Dimensions

With standard batt. 215.5mm L x 80.2mm W x 39.25mm D  
8.3 in. L x 3.1 in. W x 1.5 in D

Grip Width 64.5mm / 2.5 in

### Weight

Mid/STD Scanner & STD battery 468g / 16.5oz

Mid/STD Scanner & EXT battery 508g / 17.9oz

EL range Scanner & STD battery 516g / 18.2oz

EL range Scanner & EXT battery 556g / 19.2oz

### Display

3.5" (240 x 320 pixel) QVGA, TFT-LCD  
3.5" (480 x 640 pixel), VGA, TFT-LCD  
VGA model only: LED Backlight 600NITS,  
Daylight readable (500 nits typical),  
Wide viewing angle

### Power

Removable, rechargeable

Standard Battery 3,120mAh Li-ion rechargeable

Extended Battery 5,200mAh Li-ion rechargeable

### Keypad

2 Keypad options 32 key Numeric (Shifted alpha),  
(Service-depot replaceable) 56 key Full alpha & Numeric

### Audio Support

Supports VoIP  
Built-in microphone and speaker  
Headset jack (3.5mm)

### Standard Communications

High speed USB 2.0 from  
either cradle or USB sync cable  
RS232 (115 Kbps) from cradle

## PERFORMANCE CHARACTERISTICS

### Main-Processor

TI - Cortex A8 Processor @ 1GHz

### Operating System

Windows Embedded CE 6.0 Professional  
Windows Embedded Handheld 6.5 Professional  
Google Android 4.2.2 Jellybean

### Memory and Storage

RAM 512MB

ROM (NAND Flash) 1GB

Micro-SD Micro-SD card slot supports  
up to 32GB SDHC

## USER ENVIRONMENT

**Operating Temperature** -20°C to 50°C / -4°F to 140°F

**Storage Temperature** -40°C to 70°C / -40°F to 158°F

**Humidity** 95% Non-condensing

**Drop** 1.8m (6 ft) across the operating  
temperature range

**Rain / Dust Proof (Sealing)** IP65

**Tumble** 500cycle (1,000hits) at 1m (3.3ft)

**Electrostatic Discharge** ±15 kV air discharge  
±8 kV contact discharge

## DATA CAPTURE

**Camera** 5.0 MP AF camera with flash light

### Integrated Barcode Reader

1D Mid-range Laser Scanner Reads up to 2.5meter (55mil Code 39)

1D/2D Standard range Imager Reads up to 381 mm (UPC 100%)

1D/2D Extra long range Imager Reads up to 11meter (100mil Data Matrix)

## GLOBAL POSITIONING SYSTEM

### GPS

Standalone GPS, Assisted GPS  
-Control Plan - E911  
-User Plan -gpsOneXTRA(TM)

## WIRELESS

### Wireless WAN (Data only, no voice)

UMTS Frequencies: 800, 850, 900, 1900, 2100MHz  
GSM/GPRS Frequencies: 850, 900, 1800, 1900MHz  
Technology Class UMTS: 3.9G HSPA+ Max  
Max speeds: Uplink - 5.76 Mbps  
Downlink - 14.4 Mbps

### Wireless LAN

IEEE 802.11 a/b/g/n  
Data rates: 11, 54 and 72.2 Mbps  
Channels: 1 to 13 (2.4GHz) / 36 to 165 (5GHz)  
Regulatory compliance: As per IEEE 802.11n  
Security: WEP / WPA / WPA2 and more  
Authentication: PEAP/MS-CHAPv2, EAP-TLS, CCX  
Encryption: WEP, AES, TKIP

### Wireless PAN

Bluetooth Integrated Bluetooth Class II, Ver.2.1+EDR  
Channels 0 to 78 (2402-2480 MHz)  
Data Rates 1, 2, 3 Mbps

## REGULATORY APPROVALS AND COMPLIANCE

FCC, IC, cUL, CE, CB, ANATEL,  
UL HAZLOC ISA12.12.01 (C1,D2,G A-D)  
CCC&SRRC, TELEC, KC, RoHS II

## ENTERPRISE SOLUTION

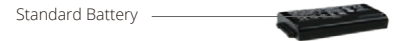
SOTI, Airwatch, Teamviewer

## ACCESSORIES

### Standard Accessories



AC/DC Power Adapter



Standard Battery



Stylus Pen and Tether

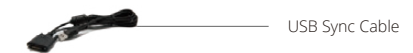


Hand Strap



LCD Protection Film

### Optional Accessories



USB Sync Cable



Single-Slot Cradle



Single-Slot Ethernet Cradle



Extended Battery



Gun-Handle



4-Slot Battery Charger



4-Slot Cradle