

# PWS-870

## 10" Industrial Tablet with 4th Generation Intel® Core™ i Processor



### Features

- MIL-STD-810G and IP65 certified, can withstand drops of up to 4ft.
- 10.1" HD high-brightness, multi-touch, Gorilla Glass panel with digitizer
- 4th generation Intel® Core™ i processor supports Windows 8
- Built-in 4G LTE, WLAN (802.11 a/b/g/n/ac), BT4.0, and GPS modules with Beidou/GLONASS support
- Hot-swappable battery provides up to 11 hours operation<sup>(1)</sup>
- Built-in dual cameras, 1D/2D barcode scanner, and NFC RFID
- Rich peripherals with vehicle docking station, desk docking station, and extension module support



### Introduction

The PWS-870 is a fully rugged mobile tablet featuring a 10.1" HD resolution capacitive Multi Touch panel, an Intel Core i processor, mSATA SATA3 SSD storage, USB 3.0 and HDMI communication IO ports. For communication it comes with 802.11 a/b/g/n/ac WiFi, Bluetooth, GPS, and 4G LTE. One of the most important unique design features is its built-in data collection features: 2M/5M dual cameras, 1D/2D barcode reader, and NFC RFID reader. To mobile field workers, hot-swappable external battery for long-lasting support allows the system to operate for up to 11 hours at a time. The fully-rugged design (MIL-STD-810G, IP65 dust & water resistant and 4-foot drop) allows PWS-870 to perform in harsh environments. With sunlight readable display, PWS-870 is a perfect device for outdoor work.

### Specifications

Motherboard	CPU & Chipset	Intel® Core™ i3 Processor 1.7 GHz 4010U Intel® Core™ i5 Processor 1.9 GHz 4300U with Turbo Boost to 2.9GHz Intel® Core™ i7 Processor 1.7 GHz 4650U with Turbo Boost to 3.3 GHz	
	Memory	SO-DIMM DDR3L 1600 MHz up to 8 GB <sup>(2)</sup>	
	Storage	Support mSATA SATAIII SSD 64 GB ~ 256 GB <sup>(2)</sup>	
Display & Touchscreen	Display	10.1" HD (1366x768) Low reflection LED Backlight LCD (400 nits default; 950 nits by project)	
	Touch Panel	Capacitive multi touch Sunlight readable feature Display with Corning® Gorilla® Glass Gen3	
	Sensor	Ambient light, Accelerometer (G-Sensor), E-compass, Gyroscope Sensor - Screen Rotation: 0°, 90°, 270°	
System	WLAN+Bluetooth	IEEE 802.11 a/b/g/n/ac+ Blueooth V4.0(class2)+EDR	
	WWAN	Integrated 4G (LTE,HSPA+, GSM/GPRS/EDGE) MC7305 for EU B1/B3/B7/B8/B20 MC7355 for US B2/B4/B5/B13/B17/B25	
	GNSS	Dedicated GPS, Beidou and Glonass	
	Camera	Front Camera: 2M pixel CMOS sensor; supports video streaming Rear Camera: 5M pixel CMOS sensor; with LED flash light and auto focus control	
	Data Collection	Optional built-in 1D barcode scanner (Honeywell N4313) Optional built-in 2D barcode scanner (Honeywell N5600) Optional built-in NFC RFID reader (13.56MHz, supports ISO14443A/B, ISO15693, MIFARE, Felica)	
	Security	1. Optional fingerprint scanner 2. TPM 1.2 3. Kensington cable lock slot	
	Audio	Integrated speakers (2W) Integrated microphone	
	Input	Capacitive multi touch Programmable button x2	Capacitive pen On-screen QWERTY keyboard
	LED	Power LED Battery LED RFID LED	
	I/O	USB 3.0 x2; USB 2.0 x1 HDMI 1.4 x1 SD card slot x1 (SDXC/UHS1/UHS2) Audio combo jack (Line-in/Line-out) x1	DC-in x1 Docking port x1 (32PIN) (USB3.0, USB2.0, PCIE Gen2, Display port) SIM slot x1
	Battery	Main battery: 4S1P 14.4V 2730mAh Hot-Swappable external battery: 4S2P 14.4V 4080mAh With Hot-Swappable external battery up to 11hrs <sup>(1)</sup>	
	Power Input	19V ± 5%	
	OS	Windows Embedded 8.1 Industry Pro (Default), Windows Embedded 8 Standard (Default), Windows 7 Pro 64bit (By project), Linux Ubuntu (By project) Windows 10 IoT 64 bit (By project)	

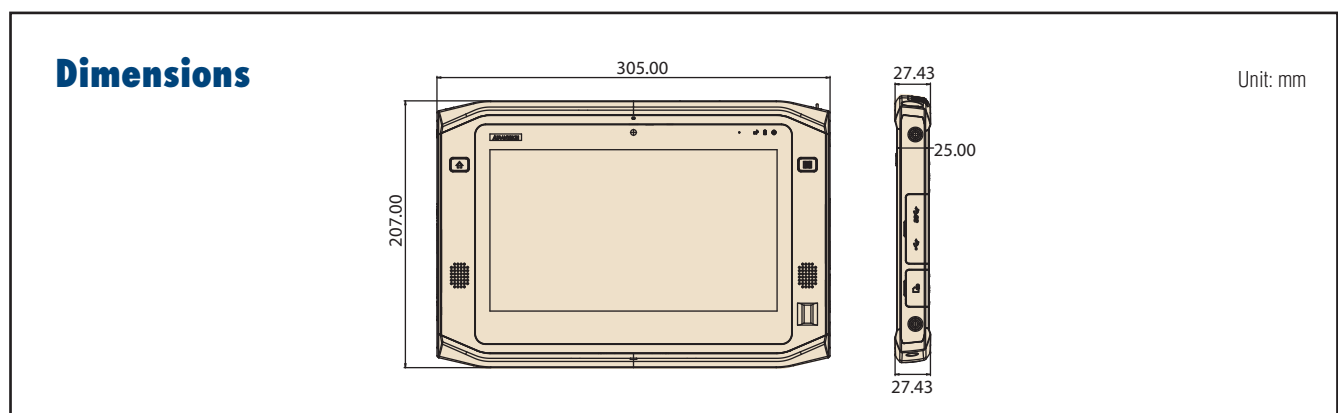
(1) The battery life estimates based on MobileMark 2007 performance. Battery performance will vary by system setting and configuration.

(2) Only Advantech is able to change SSD and Memory.

## Specifications Cont.

Environment	Temperatue & Humidity	Operating Temperature -20° C ~ 50° C (Charge: 0° C ~ +40° C for the battery protection) Storage Temperature -20 ~ 60° C Operating Humidity 5% ~ 95% @ 40° C
	IP Rating	IP65
	Vibration	MIL-STD-810G
Certifications	EMC/RF	CE/FCC/CCC/PTCRB/SAR
	Safety	UL/CE/CB/CCC
	Peripheral <sup>(3)</sup>	<ul style="list-style-type: none"> <li>▪ Universal Cover (Handle, stand, hand strap, and shoulder belt)</li> <li>▪ Extension modules for MSR, UHF RFID, extra IO ports solution</li> <li>▪ Desk docking station</li> <li>▪ External battery</li> </ul>
Dimension & Weight	Dimensions	305 (L) x 207 (W) x 25-27 (H) mm
	Weight	1.4 kg

(3) For the peripherals' availability, please check with Advantech's sales directly.



## I/O Connectors



1. 2M Camera
2. Home Key (Programmable)
3. Function Key (Programmable)
4. Speakers
5. Fingerprint (Optional)

6. 5M AF Camera with Flash Light
7. FAN
8. NFC RFID Reader (Optional)
9. Capacitive Pen
10. Latch (For External Battery)

1. Kensington Lock
2. Power Button
3. Audio Combo Jack
4. HDMI Connector (1.4)
5. USB Connector (USB3.0)
6. DC-in

7. Screw Hole for Extension Module
8. USB Connector (USB3.0)
9. USB Connector (USB2.0)
10. SD Card Slot (SDXC)
11. Screw Hole for Extension Module

## Ordering Information

Part Number	Configuration												
	CPU	LCD	Memory	Storage	Front/Rear CAM	WiFi	BT	GNSS	4G	OS	Barcode RFID	NFC	FingerPrint
PWS-870-3S6W0E000E	Core i3	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	N/A	N/A	WES 8	N/A	N/A	N/A
PWS-870-3S6W00000E	Core i3	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	N/A	N/A	N/A	N/A	N/A	N/A
PWS-870-3S6G4E5F0E	Core i3	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-US	WES 8	2D	NFC	FingerPrint
PWS-870-3S6G6E5F0E	Core i3	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-EU	WES 8	2D	NFC	FingerPrint
PWS-870-3H6G6E5F0E	Core i3	High Brightness	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-EU	WES 8	2D	NFC	FingerPrint
PWS-870-5S6G4P5F0E	Core i5	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-US	Win8.1 Pro	2D	NFC	FingerPrint
PWS-870-5S6G6P5F0E	Core i5	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-EU	Win8.1 Pro	2D	NFC	FingerPrint
PWS-870-7S6G4P5F0E	Core i7	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-US	Win8.1 Pro	2D	NFC	FingerPrint
PWS-870-7S6G6P5F0E	Core i7	Sunlight	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-EU	Win8.1 Pro	2D	NFC	FingerPrint
PWS-870-7H6G6P5F0E	Core i7	High Brightness	DDR3 4GB	SSD 64GB	V	V	V	V	LTE-EU	Win8.1 Pro	2D	NFC	FingerPrint

## Packing List

Part Number	Description
96PSA-A65W19V1-1	65W Adapter *1 pcs
9680015843	Stylus Pen * 1 pcs