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(*1)
- Built-in dual cameras, 1D/2D barcode scanner, and NFC RFID
- Rich peripherals with vehicle docking station, desk docking station, and extension module support

IP65 4ft

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 communcation 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 it's 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(*2)	
	Storage	Support mSATA SATAIII SSD 64 GB ~ 256 GB(*2)	
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+ Bluebooth 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 Programable 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(*1)	
	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)	

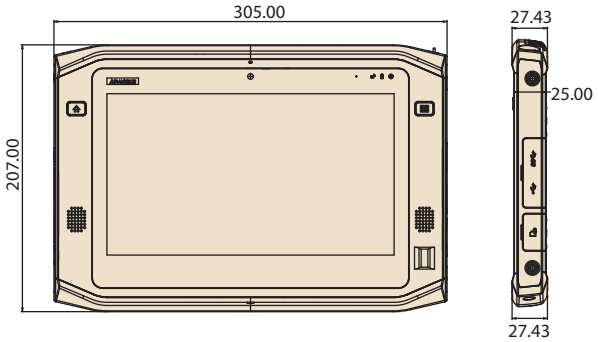
(1) The battery life estimates based on MobileMark 2007 performance. Battery performance will vary by system setting and configuration.
(2) Only Advantech is able to change SSD and Memory.

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
	Drop	4 feet
Certifications	EMC/RF	CE/FCC/CCC/PTCRB/SAR
	Safety	UL/CE/CB/CCC
Peripheral	Peripheral(*3)	▪ Universal Cover (Handle, stand, hand strap, and shoulder belt) ▪ Extension modules for MSR, UHF RFID, extra IO ports solution ▪ Desk docking station ▪ External battery ▪ Car adapter ▪ Vehicle docking staion ▪ Multiple Battery Charger
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.

Dimensions



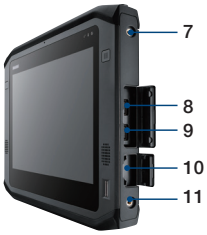
Unit: mm

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												Fingerprint
	CPU	LCD	Memory	Storage	Front/Rear CAM	WiFi	BT	GNSS	4G	OS	Barcode RFID	NFC	
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

Accessories

Accessories for PWS-870 Series

Universal Cover Package

Features

- P/N: PWS-870-UCOVER00E
- Material: Plastic, PVC
- Color: Black
- Dimension: 305 x 254.2 x 88.4 mm
- Weight: 500g (universal cover, hand strap and shoulder belt)
- Package content: universal cover, hand strap, shoulder belt

MSR & Smart Card Reader Extension

Features

- P/N: PWS-870-EXT300E
- Smart Card Reader
  - ISO 7816 PC/SC
  - EMV 4.0 Level 1
  - Supports I2C memory card, SLE4418, SLE4428, SLE4432, SLE4442, SLE4436,SLE5536, SLE6636, AT88SC1608, AT45D041 card
- MSR (Magnetic Card Reader)
  - MagneSafe IntelliHead
  - Supports US 7810 & ISO 7811/AAMVA
  - Card speed: 6 to 60 ips (15.4 to 12.4 cm/s)
  - Triple DES encryption
  - DUKPT key management
- Operating temperature: -20° C ~ 50° C
- Storage temperature: -20° C ~ 60° C
- Dimension: 192.2 x 40.2 x 25 mm
- Weight: 120g

I/O Extension

Features

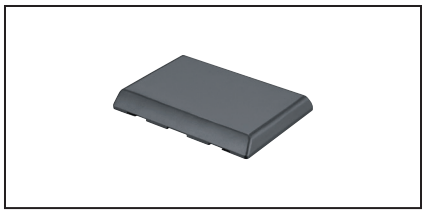
- P/N: PWS-870-EXT100E
- Interfaces: USB 3.0 (type A, 5V/0.9A) x 1, RS-232 (D-Sub 9) x 2, 10/100/1000 Ethernet (RJ45) x 1
- Operating temperature: -20° C ~ 50° C
- Dimension: 192.2 x 45.2 x 25 mm
- Weight: 140g

UHF RFID Extension

Features

- P/N: PWS-870-EXT200E (EU) / PWS-870-EXT210E (US)
- RFID output power: 0.063 watt EIRP
- RFID antenna type: Linear Polarization
- Frequency: EU: 865 ~ 868MHz / US: 902 ~ 928MHz
- Tag standard supported: EPC Class 1 Gen 2 / ISO 18000-6C
- Operating temperature: -20° C ~ 50° C
- Maximum output power: +18dBm (Conductive)
- Dimension: 192.2 x 40.2 x 25 mm
- Weight: 110g

External Battery



Features

- P/N: PWS-870-BAT100E
- Capacity: 14.8V 4080mAh
- IP rating: IP65 with PWS-870
- Dimension: 141.2 x 106.2 x 17 mm
- Weight: 385g

Multiple Battery Charger

Features

- P/N: PWS-870-MBC00E
- Store and charge up to 4 PWS-870 external batteries
- Charging time: 4 hr
- LEDs indicate charge status
- Easy to fix on the table by screws
- Power input: 19.5V/7.7A
- Dimension: 214.4 x 229.4 x 60 mm
- Weight: 1.4kg

Accessories

PWS-870 Vehicle Docking Station

Features

- CAN 2.0 A/B (J1939) and OBDII (ISO 15765) support for vehicle diagnosis
- Anti-theft locking mechanism
- External GPS SMA antenna
- Device docking and removal within 1 second
- Ignition control
- Accommodates port replication
- Compliant with MIL-STD-810G and SAE J1455 for vibration and shock tolerance
- E-Mark compliant and supports 12V/24 V vehicle power

Introduction

The PWS-870 high strength composite vehicle docking station is designed to hold the PWS-870 tablet safely and securely. The vehicle docking station comes with a locking mechanism for theft deterrence. It offers complete port replication for users accessing audio jacks, USB, RS-232, DI, DO, LAN, and GPS SMA connector. One of the most important and unique design features is it has CAN bus support for vehicle communication. It's a perfect solution for police car, fire bridge, ambulance, forklift, and different kinds of transportation applications.

Product Specifications

Function	Item	Description
IO connectors	HDC	1 x HDC connector
	HDC IO ports	1 RS-232, 1x CAN 2.0 A/B (support J1939); OBDII (support ISO 15765) protocol, 1 x Line-in & 1 x Line-out, 2 x DI & 2 x DO
	USB	2 x USB 3.0 (locking type)
	Ethernet	1 x 100/1000 LAN port (M12)
	SMA for GPS	1 for external GPS Antenna
	DC in	1 x Power Jack (M12) 19V ± 5% (pair with a.car adapter: PWS-770-CAD1200E, PWS-770-CAD2400E, PWS-770-CADAP00E. b. DC-in(M12) to adapter cable: 1700021797-01)
Environment	IP Rating	IP54 (with tablet docked and all cables connected)
	Operating Temperature	-20° C ~ 50° C (Charge: 0° C ~ 40° C) with tablet
	Storage Temperature	-40° C ~ 85° C
	Vibration/Shock	MIL-STD-810G, Method 514.5; SAE J1455
	EMC	CE, FCC
	Safety	UL, CB
	Vehicle-related	E-Mark (E13) (pair with PWS-770-CAD1200E, PWS-770-CAD2400E)
Mounting	Mounting Way	VESA (75 x 75 mm)
Weight		950g
Dimension		240.5 x 280.9 x 95.4 mm

Ordering Information

Part Number	Description
PWS-870-VCRADLE00E	PWS-870 Vehicle docking station, with LAN Cable M12(M) cable 8P/RJ45(F) (5cm)
PWS-870-VCRADLE01E	PWS-870 Charge only Vehicle docking station
PWS-870-VMOUNT00E	PWS-870 Vehicle docking station without i/o ports
PWS-770-CADAP00E*	PWS-770/PWS-870 Car Adapter DC to DC 10~32V 90W (120cm) to Cigar Lighter; M12 Plug
PWS-770-CAD1200E*	PWS-770/PWS-870 Car Adapter DC to DC 10~32V 90W with 12V Relay (120cm); M12 Plug
PWS-770-CAD2400E*	PWS-770/PWS-870 Car Adapter DC to DC 10~32V 90W with 24V Relay (120cm); M12 Plug
1700021797-01	M12 plug to DC-in cable (10cm) Note: Connect from PWS-770/PWS-870 Vehicle docking DC-in (M12) to Power adapter Jack (96PSA-A65W19V1-1)
PWS-870-CHDC00E	PWS-870 Vehicle docking HDC Cable RS232 x1; CAN2.0 x1; DIx2; DOx2; Line-in x1; Line-out x1 (200cm)
PWS-770-GPSAN00E	GPS antenna 5.5V 22mA (500cm)
RAM-MOUNT-06E	5.625" double socket arm for 1.5" ball base, 3.625" VESA base at both sockets
RAM-MOUNT-07E	5.625" double socket arm for 1.5" ball base, One side is 3.625" VESA base, on the other side, the socket with flat 2.5" diameter base AMPS hole pattern
PWS-870-VDOCK-CBE	Vehicle docking starter cable kit (power cable, HDC cable & GPS antenna)

Note:

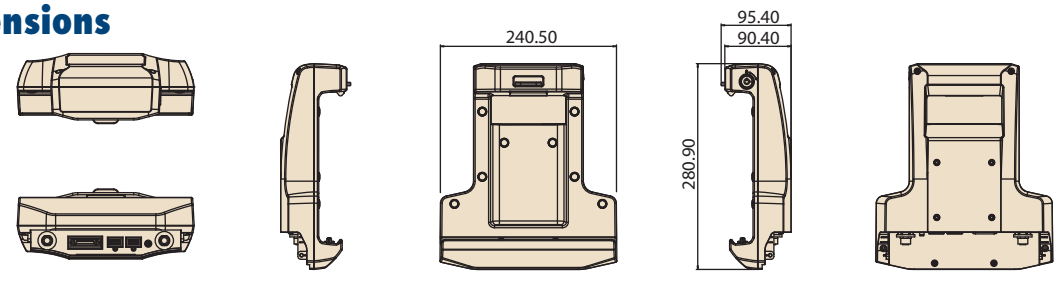
1. PWS-870 Vehicle Docking packages include LAN Cable for M12 to RJ45 connector. The car adapter is optional. Do not attempt to connect Car adapter M12 plug to PWS-870 tablet DC-in
2. For first time purchase, we strongly recommend to purchase starter cable kit & power adapter (select suitable power adapter from the there adapters marked with*) for evaluation

Bottom view IO ports

1. 1 x LAN 100/1000 (M12)
2. 1 x GPS SMA
3. 2 x USB 3.0 (locking type)
4. 1 x HDC: RS232 x1; CAN2.0 x1; DIx2; DOx2; Line-in x1; Line-out x1
5. 1 x DC-in (M12)

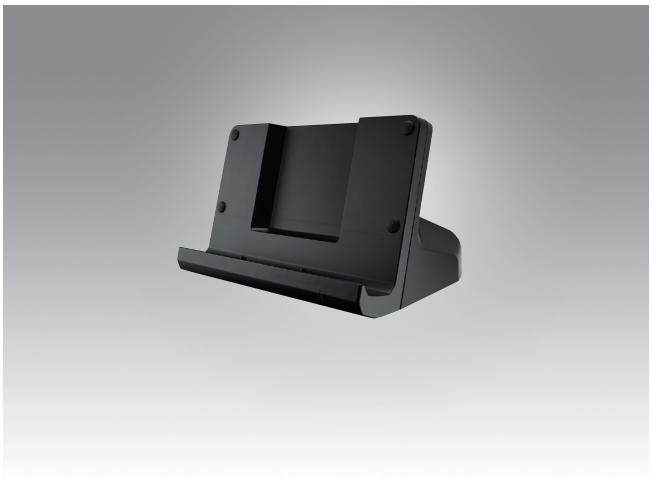
Dimensions

Unit: mm



Accessories

PWS-870 Desk Docking Station



Features

- Offers complete port replication for PWS-870
- Operating temperature -20° C ~ 50° C

Introduction

The desk docking station is designed to dock PWS-870 tablet when you are at your home or on your office desk. When docked, you can charge both the internal and external batteries or transfer data from your tablet PC to another PC.

Product Specifications

Feature	Description
Product Name	PWS-870 Desk Docking Station
External I/O Interfaces	One LAN port (10/100/1000) One VGA port One RS-232 Two USB 3.0 host connectors One DC-in (19 V +- 5%)
Environment	Operating Temperature -20° C ~ 50° C Storage Temperature -20° C ~ 60° C Operating Humidity 5% ~ 95%
Certifications	CE, FCC, UL, CB
Physical Size	223.8 x 146.7 x 128.5 mm
Weight	820g

No.	Component	Function
1	LAN port	Connect an RJ-45 cable to access LAN connection
2	VGA port	Connect a VGA port to connect to another monitor
3	Serial port	Connect a serial cable to connect to another PC
4	USB ports	Connect USB connectors to transfer data
5	DC-IN	Connect the AC adapter to charge the battery

Note: In order to prevent the damage to both PWS-870 and the desk docking station, please do not attempt to use with other tablets.

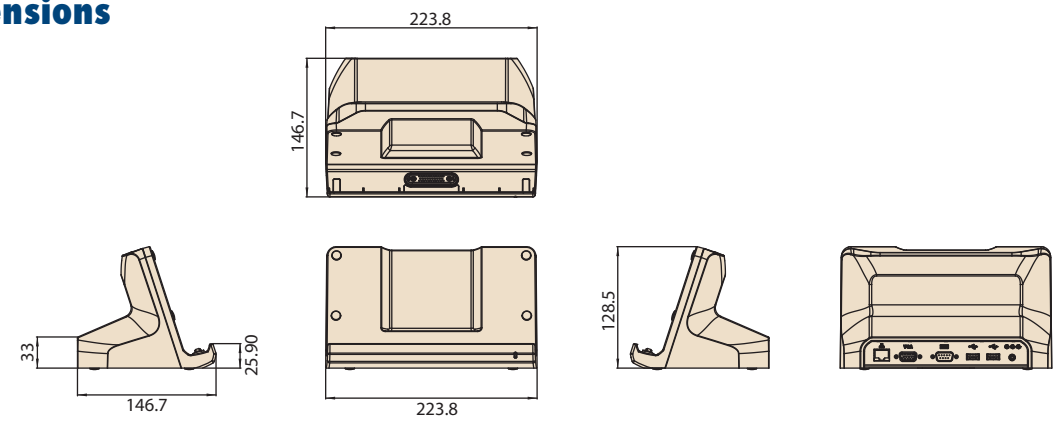
Ordering information

Part Number	Description
PWS-870-CRADLE00E	PWS-870 Desk Docking Station

Note: The package does not include power adapter. Please use PWS-870 tablet's power adapter directly.

Dimensions

Unit: mm



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Panel PCs ***category:***

Click to view products by Advantech ***manufacturer:***

Other Similar products are found below :

GOT-5100T-832 GOT-3126T-832 BYARM-W071-PC STC-15WR-E3950,4G,64GB M.2 STC-15WP-E3950,4G,64GB M.2 POC-W152-C11D-ACE PWS-770-VMOUNT00E PWS-870-CHDC00E PWS-870-UCOVER00E TPC-31T-E3AE TREK-572-LWB7B0E ESRP-HMI-TPC1551 ESRP-HMI-TPC1251 ESRP-HMI-TPCB200 BYARM-181-PC BYTEM-121-PC IDOOH-210-IR AFL3-W15A-BT-J1/PC/2G-R13 IOVU-07F-AD-WBC-R10 003002400100 1050387 SPTM20XP XPTB10X UTC-W101BF-ABI0E UTC-W101B-ABI0E UTC-W101B-AWI0E UTC-532C-GE UTC-532A-GE UTC-520A-PE UTC-520A-GE TREK-722R-A1E TREK-570-00A0E PWS-870-7S6G4P5F0E PPC-174T-WL-MTE 110070048