

PWS-872

10" Industrial-Grade Tablet with 7th Generation Intel® Core™ i3/i5/i7/ Celeron® Processor



Features

- Equipped with DeviceOn/iService software for remote device management
- 7th generation Intel® Core™ i3/i5/i7/Celeron® processor with integrated Intel® Turbo Boost technology
- 10.1" high-brightness WXGA LED display with scratch-resistant Corning® Gorilla® Glass 3 panel
- Multi-touch PCAP touchscreen with support for gloved operation
- Rugged design with MIL-STD-810G certification, IP65 rating, and 4-ft. drop tolerance
- 4G LTE, WLAN (802.11 a/b/g/n/ac), Bluetooth 4.1, and GPS modules with BeiDou/GLONASS support
- Built-in front and rear cameras, 1D/2D barcode scanner, and NFC RFID reader
- Hot-swappable battery supports up to 11 hours operation*
- Microsoft® Windows 10 OS
- Optional peripherals include vehicle docking station, desk docking station, and multiple extension modules



DeviceOn/iService

Introduction

PWS-872 is an industrial-grade tablet equipped with an Intel® Core™ i3/i5/i7/Celeron® processor, 10.1" WUXGA LED display with multi-touch PCAP control, mSATA SATA III SSD storage, multiple I/O, and Wi-Fi (802.11 a/b/g/n/ac), NFC, 3G/4G LTE, and Bluetooth 4.1 communication technologies. The built-in front (2M) and rear (8M) cameras, 1D/2D barcode scanner, and NFC reader provide convenient data collection tools, and the high-brightness sunlight-readable display supports outdoor applications. For mobile field-service applications, PWS-872 can be integrated with a hot-swappable external battery that supports up to 11 hours operation to enable long-duration use. Designed for harsh environments, PWS-872 is also MIL-STD-810G certified for shock and vibration tolerance, IP65 rated for protection from water and dust ingress, and can withstand drops of up to 4 ft. Moreover, PWS-872 can be integrated with a wide range of peripherals, such as a vehicle docking station, multi-bay battery charger, universal cover, and various I/O extension modules, to provide application-specific solutions.

Moreover, PWS-872 is equipped with Advantech's DeviceOn/iService software, which is a next-generation unified device management solution based on the WISE-DeviceOn platform. With support for batch operations and multi-device control, DeviceOn/iService enables easy device configuration and deployment for convenient remote device management.

Specifications

| | | |
|---------|-----------------|--|
| Core | CPU & Chipset | Intel® Celeron® 3965U, 2.2 GHz Intel® Core™ i3-7100U, 2.4 GHz Intel® Core™ i5-7300U, 2.6 GHz (3.5 GHz Intel® Turbo Boost) Intel® Core™ i7-7600U, 2.8 GHz (3.9 GHz with Intel® Turbo Boost) |
| | Memory | SODIMM DDR4, 2100 MHz (up to 16 GB) |
| | Storage | mSATA SATA III SSD (64 GB ~ 1 TB) |
| Display | Display | WXGA LED display with resolution, 300-nit brightness, anti-glare surface for sunlight readability, and LED backlight |
| | Touch Panel | Multi-touch projected capacitive touchscreen with scratch-resistant Corning® Gorilla® Glass 3 panel and support for gloved operation |
| | Sensor | Ambient light, accelerometer (g-sensor), e-compass, gyroscope (0°, 90°, 270° screen rotation) |
| System | WLAN+Bluetooth | IEEE 802.11 a/b/g/n/ac wave 2 + Bluetooth 4.1 EDR |
| | WWAN | 4G LTE, HSPA+/UMTS, GSM/GPRS/EDGE (optional) PLS8-E for EU 800/900/1800/2600, PLS8-X for US 700/850/AWS/1900 (optional) |
| | GNSS | Integrated GPS, BeiDou, GLONASS |
| | Camera | Front: 2 megapixel CMOS sensor camera with video streaming support Rear: 8 megapixel CMOS sensor camera with LED flash and auto focus |
| | Data Collection | Optional 1D barcode scanner (Honeywell N4313), 2D barcode scanner (Honeywell N3680), and NFC RFID reader (13.56 MHz, supports ISO14443A/B, ISO15693, MIFARE, FeliCa) |
| | Security | 1 x Fingerprint scanner (optional), 1 x Trusted Platform Module 1.2, 1 x Kensington Security Slot |
| | Audio | 2 x 2W speakers, 1 x microphone |
| | Input | Multi-touch projected capacitive touchscreen, 2 x programmable buttons, 5 x programmable capacitive touch sensor inputs, 1 x capacitive stylus, on-screen QWERTY keyboard |
| | LED Indicators | Power, battery, RFID |
| | I/O | 2 x USB 3.0, 1 x USB 2.0 1 x HDMI 1.4 1 x SD card slot (SDXC/UHS1/UHS2) 1 x Audio combo jack (line-in/line-out) 1 x DC-in 1 x SIM slot 1 x Docking port (32 pin) (USB 3.0, USB 2.0, PCIE 2.0, DisplayPort) |
| | | |
| | | |
| | | |
| | | |
| | Battery | Main battery: 4S1P 14.4V 2730mAh Hot-swappable external battery: 4S2P 14.4V 4300mAh (supports up to 11 hours operation*) |
| | Power Input | 19V ± 5% |
| | OS | Microsoft® Windows 10 IoT (64 bit), Linux Ubuntu1604 |

* The estimated battery life is based on MobileMark® 2014 benchmark. Actual battery performance will vary according to system settings and configuration.

* WIFI certification only; LTE certification by project.

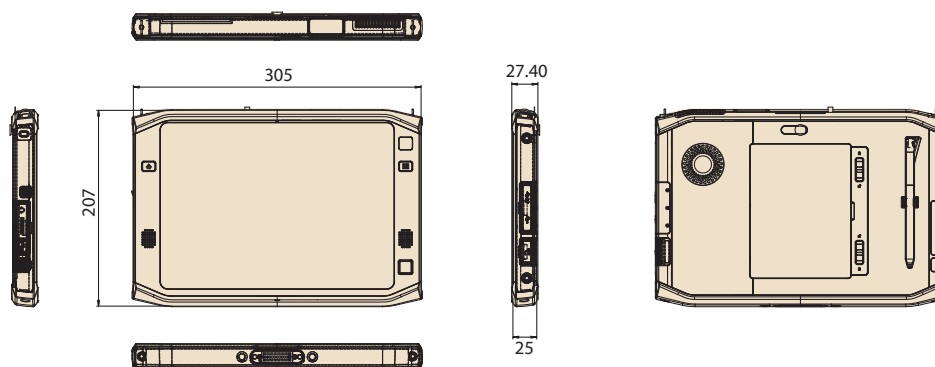
Specifications (Cont.)

| | | |
|---|---------------------------------------|--|
| Environment | Temperature | Operating: -20 ~ 50 °C/-4 ~ 122 °F (0 ~ 40 °C/32 ~ 104 °F when charging to protect the battery) Storage: -40 ~ 60 °C (-40 ~ 140 °F) |
| | Humidity | 5 ~ 95% @ 40 °C/104 °F |
| | IP Rating | IP65 |
| | Drop Tolerance | Up to 4 ft. |
| Certification | Vibration/Shock | MIL-STD-810G |
| | EMC/RF | CE/FCC/CCC/SAR* |
| | Safety | UL/CE/CB/CCC |
| | Mobile Device Management | SOTI compatible |
| Mechanical | Dimensions (L x W x H) | 305 x 207 x 25/27 mm (12 x 8.14 x 0.98/1.06 in) |
| | Weight | 1.5 Kgs (3.30 lb) |
| DeviceOn/iService Remote Device Management | Operating System | Windows 10 |
| | Common Controls (Reboot, Shutdown) | ✓ |
| | Remote desktop | ✓(VNC) |
| | Device-Specific Controls | Audio |
| | Connection Status | ✓ |
| | Hardware Status | ✓* |
| | Hard Disk Status | ✓* |
| | Batch Operation Support | ✓ |
| | OTA Storage Management | FTP |
| | OTA Software Updates | ✓ |
| | Software Watchlist | ✓ |
| | Software Start/Stop | ✓* |
| | Kiosk Mode | |
| | Peripherals Watchlist | ✓* |

Note: DeviceOn/iService software must be downloaded from the Advantech website at <https://www.advantech.com/search/?q=DeviceOn%2FiService&st=support&sst=Utility>

Dimensions

Unit: mm



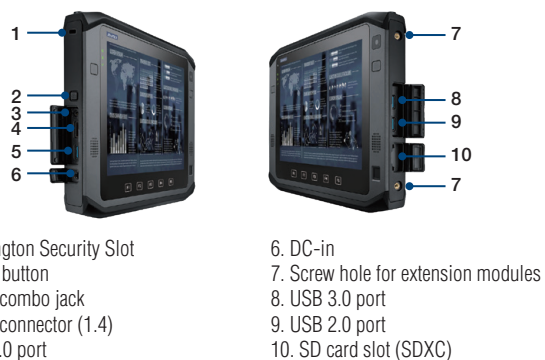

Zapraszamy do kontaktu!
Więcej informacji: www.kreski.pl

System I/O

PWS-872 Front/Rear View



PWS-872 Right/Left Side View



Ordering Information

| Standard SKU | Configuration | | | | | | | | | | | RFID reader | Barcode scanner | Fingerprint scanner |
|-------------------|---------------|--------------------------------------|----------|----------------------|--------------|-------------|-------|-----|-----|--------|------------|-------------|-----------------|---------------------|
| | CPU | LCD | Memory | Storage | Front camera | Rear camera | Wi-Fi | BT | GPS | 4G | OS | | | |
| PWS-872-CS6W0X000 | Celeron | Standard (without capacity hot keys) | DDR4 4GB | SSD 64GB (0 ~ 70 °C) | - | - | Yes | Yes | - | - | Win 10 IoT | - | - | - |
| PWS-872-CS6W0X200 | Celeron | Standard (without Capacity Hot Key) | DDR4 4GB | SSD 64GB (0~70°C) | Yes | Yes | Yes | Yes | - | - | Win10 IoT | - | 2D | - |
| PWS-872-3S6W0X000 | Core i3 | Standard | DDR4 4GB | SSD 64GB (0 ~ 70 °C) | Yes | Yes | Yes | Yes | - | - | Win 10 IoT | - | - | - |
| PWS-872-3S6W4X200 | Core i3 | Standard | DDR4 4GB | SSD 64GB | Yes | Yes | Yes | Yes | - | LTE-US | Win 10 IoT | - | 2D | - |
| PWS-872-3S6W6X200 | Core i3 | Standard | DDR4 4GB | SSD 64GB | Yes | Yes | Yes | Yes | - | LTE-EU | Win 10 IoT | - | 2D | - |
| PWS-872-5S6W4X200 | Core i5 | Standard | DDR4 4GB | SSD 64GB | Yes | Yes | Yes | Yes | - | LTE-US | Win 10 IoT | - | 2D | - |
| PWS-872-5S6W6X200 | Core i5 | Standard | DDR4 4GB | SSD 64GB | Yes | Yes | Yes | Yes | - | LTE-EU | Win 10 IoT | - | 2D | - |
| PWS-872-7S6W4X200 | Core i7 | Standard | DDR4 4GB | SSD 64GB | Yes | Yes | Yes | Yes | - | LTE-US | Win 10 IoT | - | 2D | - |
| PWS-872-7S6W6X200 | Core i7 | Standard | DDR4 4GB | SSD 64GB | Yes | Yes | Yes | Yes | - | LTE-EU | Win 10 IoT | - | 2D | - |

Packing List

| Part Number | Description |
|------------------|-----------------------|
| 96PSA-A65W19V1-1 | 1 x 65W adapter |
| 9680015843 | 1 x Capacitive stylus |



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DeviceOn/iService

Unified Remote Device Management Software



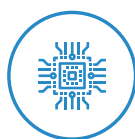
Features

- Supports Advantech devices equipped with Windows, Android, and Linux OS
- Flexible device, location, user, and permissions management
- Enables remote monitoring and control of hardware, software, and peripherals
- Supports over-the-air (OTA) firmware and software updates
- Ensures quick, easy, and secure device onboarding
- RESTful APIs for third-party system integration

Introduction

Advantech's DeviceOn/iService is a next-generation unified device management solution based on the WISE-DeviceOn platform. Designed to enable centralized monitoring and remote management, DeviceOn/iService supports Advantech devices equipped with Windows, Linux, or Android operating systems. The software also supports the management of applications and integrated peripherals, such as a barcode scanner, card reader, camera, and printer. Users can remotely access and control connected devices, take screenshots, rollout OTA upgrades, and use remote desktop capabilities for troubleshooting from any location at any time. Moreover, DeviceOn/iService supports batch operations to facilitate the management of multiple devices simultaneously for easy and convenient device configuration and deployment.

Total Management



Devices & Hardware

- Windows, Linux, Android
- Hardware, storage, battery



Software & Peripherals

- Software monitoring & access
- Screens, USB devices, printers



Open for Expansion

- Peripheral integration
- Open APIs for integration

Remote Access



Real-Time Monitoring

- Connection/hardware status
- Software/peripheral status
- Failure notifications



Remote Controls

- Power controls
- Audio, backlight controls
- Software controls



Troubleshooting

- Screenshots
- Remote desktop support

Operational Efficiency



OTA updates

- System/software updates
- File repository management
- App store



Batch Controls

- 1-to-many batch reboot, etc.
- Time-saving tasks

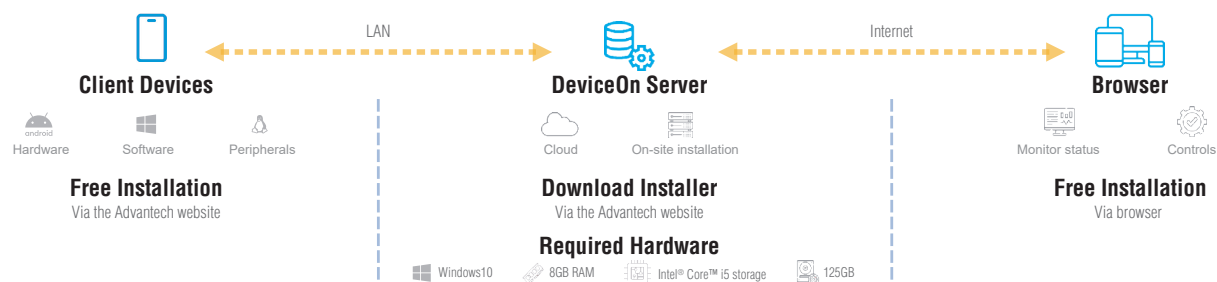


Setup Booster

- Software/peripheral watchlist
- Roles, rule templates

Note: Some functions may vary according to the product

System Architecture



PWS-870/872 Peripherals

Optional Accessories and Extension Modules for the PWS-870/872 Series



Universal Cover Package



Features

- Material: Plastic, PVC
- Color: Black
- Dimensions: 305 x 254.2 x 88.4 mm (12 x 10 x 3.48 in)
- Weight: 500 g (1.10 lb)
- Package contents: Universal cover with handle, stand, strap, and holster options

Extension Modules

MSR and Smart Card Reader



Features

- Smart Card Reader
 - ISO 7816 PC/SC
 - EMV 4.0 Level 1
 - Supports I2C memory cards (SLE4418, SLE4428, SLE4432, SLE4442, SLE4436, SLE5536, SLE6636, AT88SC1608, AT45D041)
- Magnetic Stripe Reader
 - MagneSafe™ IntelliHead
 - Supports US 7810, ISO 7811/AAMVA
 - Read speed: 6 ~ 60 IPS (15.4 ~ 12.4 cm)
 - Triple DES encryption
 - DUKPT key management
- Operating temperature: -20 ~ 50 °C (-4 ~ 122 °F)
- Storage temperature: -20 ~ 60 °C (-4 ~ 140 °F)
- Dimensions: 192.2 x 40.2 x 25 mm (7.56 x 1.58 x 0.98 in)
- Weight: 120 g (0.26 lb)

Additional I/O



Features

- Interfaces: 1 x USB 3.0 (type A, 5V/0.9A), 2 x RS-232 (D-sub 9), 1 x 10/100/1000 Ethernet (RJ45)
- Operating temperature: -20 ~ 50 °C (-4 ~ 122 °F)
- Dimensions: 192.2 x 45.2 x 25 mm (7.56 x 1.77 x 0.98 in)
- Weight: 140 g (0.30 lb)

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Optional Accessories and Extension Modules for the PWS-870/872 Series

External Battery



Features

- Capacity: 14.4V 4300mAh
- IP rating: IP65
- Dimensions: 141.2 x 106.2 x 17 mm (5.55 x 4.18 x 0.66 in)
- Weight: 385 g (0.84 lb)

Multi-Bay Battery Charger



Features

- Supports up to 4 external batteries
- Charging time: 4 hr
- Charge status LED indicators
- Screw holes for secure installation
- Power input: 19.5V/7.7A
- Dimensions: 214.4 x 229.4 x 60 mm (8.44 x 9.03 x 2.36 in)
- Weight: 1.4 kg (3.08 lb)
- Packing material: XAASC-FSP150-RFBN2 (1 x 150w adapter)

Active Pen (for PWS-872)



Features

- Operating frequency: 90 ~ 250 KHz
- Operating temperature: 0 ~ 50 °C (32 ~ 122 °F)
- Buttons: 2 x side buttons (eraser, barrel)
- Battery: 1 x AAAA (replaceable)
- Dimensions: 140 x 9.7 mm (5.51 x 0.38 in)
- Weight: 70 g (0.15 lb)

Screen Protection Film (for PWS-872)



Features

- 10.1" replacement anti-glare screen protection film

Ordering Information

| Part Number | Description |
|-------------------|--|
| PWS-870-UCOVER00E | Universal cover package (for PWS-870/872 series) |
| PWS-870-EXT300E | MSR and smart card reader (for PWS-870/872 series) |
| PWS-870-EXT100E | I/O extension module (for PWS-870/872 series) |
| PWS-870-BAT200E | External battery (for PWS-870/872 series) |
| PWS-870-MBC00E | Multi-bay battery charger (for PWS-870/872 series) |
| PWS-872-ACTPEN | Active pen (for PWS-872) |
| PWS-872-PROFILM | 10.1" replacement screen protection film (for PWS-872) |



Zapraszamy do kontaktu!
Więcej informacji: www.kreski.pl

PWS-870/872 Peripherals

Vehicle Docking Station for the PWS-870/872 Series



Features

- CAN 2.0 A/B (J1939) and OBDII (ISO 15765) protocol support for vehicle diagnostics
- Anti-theft locking mechanism
- External GPS SMA antenna
- Compatible with 12V/24 V vehicle power
- Ignition control
- Rapid device docking and removal
- Provides complete port replication
- Compliant with MIL-STD-810G and SAE J1455 for vibration and shock tolerance
- E-mark (E13) certified for vehicle safety

Introduction

The vehicle docking station supports both the PWS-870 and PWS-872 series. Designed to provide a stable platform for in-vehicle mounting and battery recharging, the vehicle docking station is equipped with a locking mechanism to prevent theft. Replica I/O ports are provided to ensure convenient I/O access for full tablet functionality. Moreover, with the added provision of CAN bus support for vehicle diagnostics, the vehicle docking station provides the ideal in-vehicle solution for diverse automobile applications, including warehouse forklifts and police, fire brigade, and ambulance fleets.

Specifications

| | | |
|----------------|-----------------------|---|
| I/O | HDC | 1 x HDC connector |
| | HDC I/O | 1 x RS-232, 1 x CAN 2.0 A/B (supports J1939) with OBDII protocol (supports ISO 15765), 1 x line-in, 1 x line-out, 2 x DI, and 2 x DO |
| | USB | 2 x USB 3.0 (locking type) |
| | Ethernet | 1 x 100/1000 LAN (M12) |
| | SMA for GPS | 1 x for external GPS antenna |
| DC-In | | 1 x Power jack (M12) 19V ± 5% (can be paired with a vehicle adapter (PWS-770-CAD1200E/PWS-770-CAD2400E/PWS-770-CADAP00E) or DC-in (M12) adapter cable (1700021797-01) |
| | | |
| Environment | IP Rating | IP54 (with tablet docked and all cables connected) |
| | Operating Temperature | -20 ~ 50 °C/-4 ~ 122 °F (0 ~ 40 °C/32 ~ 104 °F when charging) with tablet docked |
| | Storage Temperature | -40 ~ 85 °C (-40 ~ 185 °F) |
| Certifications | Vibration/Shock | MIL-STD-810G, Method 514.5; SAE J1455 |
| | EMC | CE, FCC |
| | Safety | UL, CB |
| | Vehicle Safety | E-mark (E13) (when paired with PWS-770-CAD1200E/PWS-770-CAD2400E) |
| Mount Options | | VESA (75 x 75 mm) |
| Weight | | 950 g (2.09 lb) |
| Dimensions | | 240.5 x 280.9 x 95.4 mm (9.46 x 11.05 x 3.75 in) |

Ordering Information

| Part Number | Description (for PWS-870/872 series) |
|--------------------|---|
| PWS-870-VCRADLE00E | Vehicle docking station with LAN cable and M12(M) to 8P/RJ45(F) cable (5 cm) |
| PWS-870-VCRADLE01E | Charge-only vehicle docking station |
| PWS-870-VMOUNT00E | Vehicle docking station without I/O |
| PWS-770-CADAP00E* | Vehicle power DC 10 ~ 32V 90W (120cm) to cigarette lighter adaptor with M12 connector |
| PWS-770-CAD1200E* | Vehicle power DC 10 ~ 32V 90W adaptor with 12V relay (120 cm) and M12 connector |
| PWS-770-CAD2400E* | Vehicle power DC 10 ~ 32V 90W adaptor with 24V relay (120 cm) and M12 connector |
| 1700021797-01 | M12 connector to DC-in cable (10 cm) Note: Connect the PWS-870/872 vehicle docking station DC-in port (M12) to the power jack adapter (96PSA-A65W19V1-1) |
| PWS-870-CHDC00E | Vehicle docking station HDC cable (200 cm), supports 1 x RS-232, 1 x CAN 2.0, 2 x DI, 2x DO, 1 x line-in, 1 x line-out |
| PWS-770-GPSAN00E | GPS antenna cable 5.5V 22mA (500 cm) |
| 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 (1 socket with 3.625" VESA base, 1 socket with flat 2.5" diameter base AMPS hole pattern) |
| PWS-870-VDOCK-CBE | Vehicle docking starter cable kit (power cable, HDC cable, and GPS antenna) |

Notes:

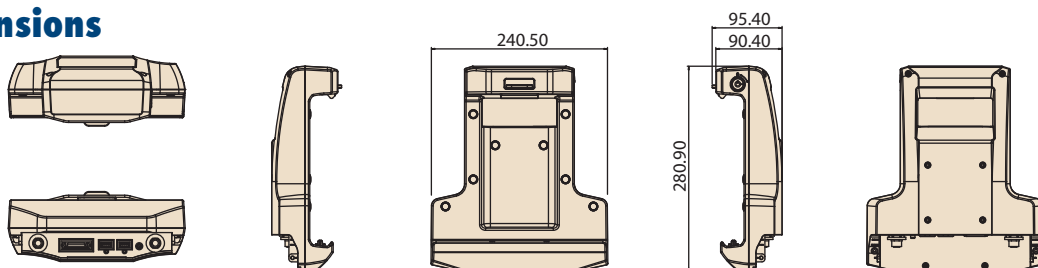
1. The PWS-870/872 vehicle docking station includes a LAN cable for M12-to-RJ45 connector. The vehicle adapter is optional. Do not attempt to connect the vehicle adapter M12 plug to the tablet's DC-in port.
2. Advantech strongly recommends initially purchasing the starter cable kit and power adapter for evaluation (suitable power adapters are marked*)

Underside I/O



1. 1 x LAN 100/1000 (M12)
2. 1 x GPS SMA
3. 2 x USB 3.0 (locking type)
4. 1 x HDC: 1 x RS232, 1 x CAN 2.0, 2 x DI, 2 x DO, 1 x line-in, 1 x line-out
5. 1 x DC-in (M12)

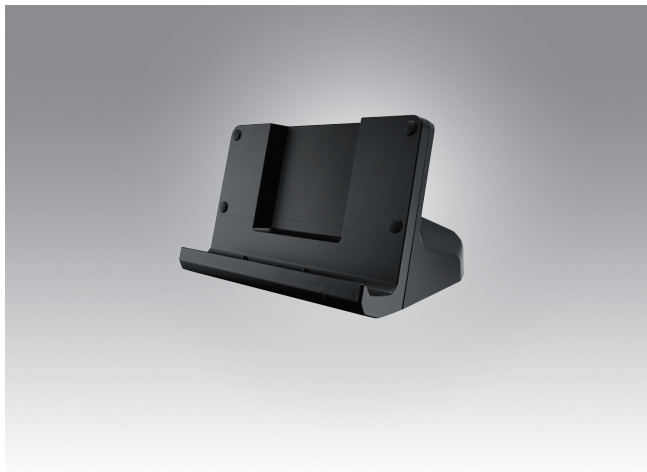
Dimensions



Unit: mm

PWS-870/872 Peripherals

Docking Station for the PWS-870/872 Series



Features

- Provides complete port replication for PWS-870/872 tablets
- Wide operating temperature range (-20 ~ 50 °C/-4 ~ 122 °F)

Introduction

The desk docking station supports both the PWS-870 and PWS-872 series. Designed to provide a stable platform for positioning the tablet on a desk or countertop, the desk docking station allows data transfers and synchronization and supports battery recharging. Moreover, the provision of replica I/O ports ensures convenient connectivity to peripherals for full tablet functionality.

Specifications

| | |
|----------------|---|
| I/O | 1 x LAN (10/100/1000) 1 x VGA 1 x RS-232 2 x USB 3.0 host connectors 1 x DC-in (19V ± 5%) |
| Environment | Operating temperature: -20 ~ 50 °C (-4 ~ 122 °F) Storage temperature: -20 ~ 60 °C (-4 ~ 140 °F) Humidity: 5 ~ 95% |
| Certifications | CE, FCC, UL, CB |
| Dimensions | 223.8 x 146.7 x 128.5 mm (8.81 x 5.77 x 5.05 in) |
| Weight | 820 g (1.80 lb) |



| 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: To prevent damage to the desk docking station, only use the desk docking station with PWS-870/872 tablets.

Ordering Information

| Part Number | Description |
|-------------------|--------------------------------------|
| PWS-870-CRADLE00E | Desk docking station for PWS-870/872 |

Note: This product does not include a power adapter. Use the standard tablet power adapter.

Dimensions

Unit: mm

