

# LEO-W

## Wearable Barcode Ring

**NEW**



### Features

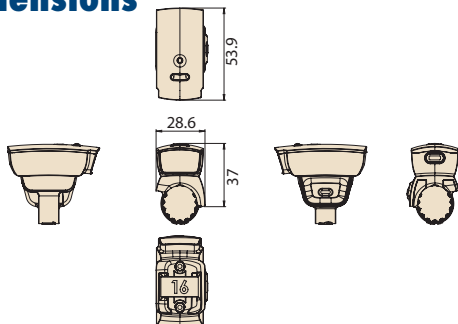
- Wearable ring enables hands-free operation
- Compact and lightweight for convenient portability
- Battery supports 8 hours operation/1.5 hour charge time
- Ergonomic design enhances user comfort

### Specifications

Sensor Type	Linear										
Resolution	4 mil/0.1 mm										
Indicator	LED, Buzzer										
Angle	Scan Angle 41° Pitch Angle ±30° Skew Angle ±40° Roll Angle ±20°										
Battery	250 mAh										
Battery Life	8 hours or 6000 scans (5 seconds per scan)										
Charge Time	1.5 hours (full capacity)										
Radio	Bluetooth 4.1 (Class 2)										
Coverage	10 m/33 ft (line of sight)										
Symbologies	UPC-A/UPC-E, EAN-8/EAN-13, Industrial 2 of 5, Codabar, Matrix 2 of 5, Code 11, Code 93, Code 32, Code 128, Standard Code 39, Full ASCII Code 39, Interleaved 2 of 5, China Postal Code, MSI Plessey Code, UK Plessey Code, EAN/UCC 128, Telepen Code, IATA Code, GS1 Databar										
Typical Depth of Field (@800 Lux)	<table border="0"> <tr> <td>▪ Code 39</td> <td>▪ UPC/EAN</td> </tr> <tr> <td>4 mil: 33 ~ 83 mm</td> <td>13 mil: 41 ~ 239 mm</td> </tr> <tr> <td>5 mil: 27 ~ 105 mm</td> <td></td> </tr> <tr> <td>10 mil: 30 ~ 205 mm</td> <td></td> </tr> <tr> <td>15 mil: 44 ~ 292 mm</td> <td></td> </tr> </table>	▪ Code 39	▪ UPC/EAN	4 mil: 33 ~ 83 mm	13 mil: 41 ~ 239 mm	5 mil: 27 ~ 105 mm		10 mil: 30 ~ 205 mm		15 mil: 44 ~ 292 mm	
▪ Code 39	▪ UPC/EAN										
4 mil: 33 ~ 83 mm	13 mil: 41 ~ 239 mm										
5 mil: 27 ~ 105 mm											
10 mil: 30 ~ 205 mm											
15 mil: 44 ~ 292 mm											
Dimensions (H x W x D)	53.9 x 37 x 28.6 mm (2.12 x 1.45 x 1.05 in)										
Weight	33 g (0.07 lb)										
Environmental	Operating Temperature	-20 ~ 50 °C (-4 ~ 122 °F)									
	Storage Temperature	-20 ~ 60 °C (-4 ~ 140 °F)									
	Humidity	Up to 95% relative humidity, non-condensing									
	Drop Tolerance	1 m									
	IP Rating	IP54									
Light Levels	70,000 lux										
ESD	4 kV contact, 8 kV air										
Certification	CE, FCC, NCC										

### Dimensions

Unit: mm



### Ordering Information

Part Number	Description
LEO-WB21-000	LEO-W barcode ring

### Packing list

Part Number	Description
1700029373-01	Magnetic USB cable
1990033112T000	#10 ring strap
1990033113T000	#12 ring strap
1990033114T000	#16 ring strap
1990033115T000	#20 ring strap
1990033116T000	#24 ring strap

# LEO-WS10

## Handheld Dimensioning & Barcode Scanner

NEW



### Features

- Laser aimer for accurate aiming at barcodes
- 3D handheld sizing scanner with embedded 2D scanner
- No pre-calibration needed
- Easy operation and portability
- Compatible with any computer (verified performance with Advantech's DLT series)
- Supports Windows, Android, and Linux OS

### Introduction

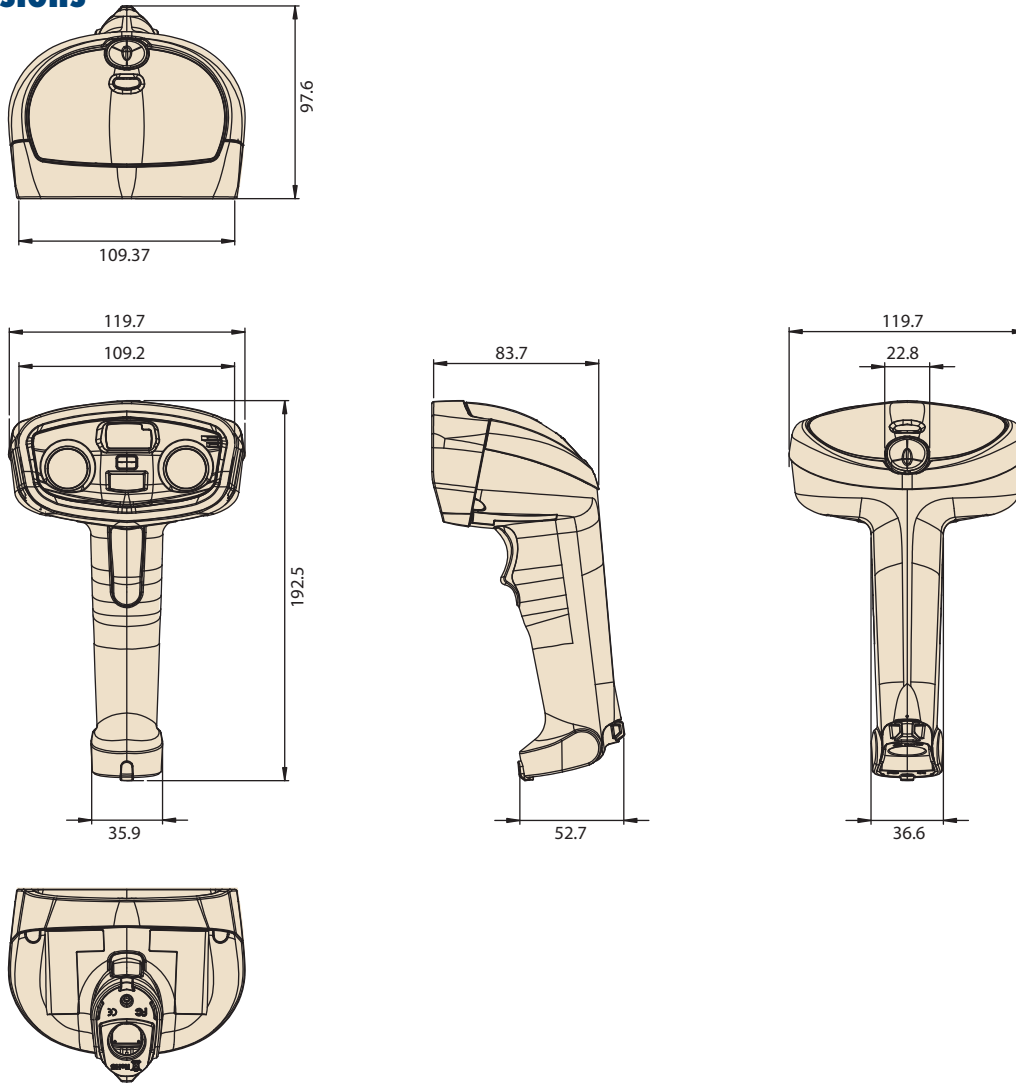
LEO-WS10 is the handheld dimensioning and barcode scanner. It can be used for diverse industrial and retail applications, such as logistics, chain store, post office, and airport kiosk operations, to speed up dimensioning, improve package collection, and accelerate loading. Moreover, to ensure convenient deployment, LEO-WS10 supports Windows, Android, and Linux OS without necessitating hardware changes.

### Specifications

Performance	Optical Working Range	40 to 150 cm (15.74 ~ 59.05 inch)
	Field of View	52° Horizontal, 30° Vertical
	Shape	Cubic and rectangular package/carton
	Accuracy	d=2, less than ±2cm deviation
	Measurement Time	<1 sec
	Min./Max. Object Length	Min. cube: 10 cm / 0.394 inches cube (OIML 20cm cube) Max. cube: 80 cm / 31.5 inches cube (OIML 60cm cube)
	Color	All opaque packaging except black, very glossy and transparent
	Measurement Angle	Pitch: 35° ~ 65°, Skew: ± 15°
	Measurement Surface	Avoid to put the box in the background whose color is too close to the box's color, avoid transparent background
	Feedback	Audible beep and LED indicators (green, red, and orange)
Barcode Reader	1D Decode Capabilities	UPC-A, UPC-E, EAN-8/JAN-8, EAN-13/JAN-13, Code 39, Code 128, Interleaved 25, Industrial 25, Matrix 25, Codabar/NW7, Code 93, China Post, MSI/Plessey, Telepen, GS1 Databar Omni-directional, GS1 Databar Limited, GS1 Databar Expanded
	2D Decode Capabilities	Data Matrix, PDF 417, QR code
	Reading Range	2 mil Code 39: 60 ~ 100 mm 4 mil Code 39: 55 ~ 110 mm 10 mil Code 39: 50 ~ 220 mm 20 mil Code 39: 50 ~ 300 mm 20 mil QR code: 50 ~ 200 mm 20 mil PDF417: 50 ~ 120 mm
Dimensions (W x H x L)	12.0 x 9.8 x 19.3 cm (4.72 x 3.86 x 7.60 inch)	
Weight	280g (9.88oz)	
Electrical Interface	Input Voltage	5V <sub>DC</sub>
	Host Interface	1 x USB or 1 x RS-232 wired cable
Aimer	Wavelength	650±10 nm red VLD IEC
	Classification	60825-1:2014 Class 1
Environment	IP Rating	IP54
	Operating Temperature	-10 ~ 40 °C (32 to 104 °F)
	Storage Temperature	-20 ~ 60 °C (-4 ~ 140 °F)
	Relative Humidity	0 ~ 70% relative humidity, non-condensing
Certifications	Ambient Light	0 ~ 3000 lux (avoid direct sunlight)
	CE, FCC, LVD, OIML certification	

### Dimensions

Unit: mm



### Ordering Information

Part Number	Description
LEO-WS10-CBA0	Handheld dimensioning & barcode scanner

# PWS-472

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor



### Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Lightweight design (295 g)
- IP65 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Wi-Fi, Bluetooth, GPS, BeiDou, and 4G LTE communication capabilities
- 13-megapixel auto-focus camera and optional 1D/2D barcode scanner



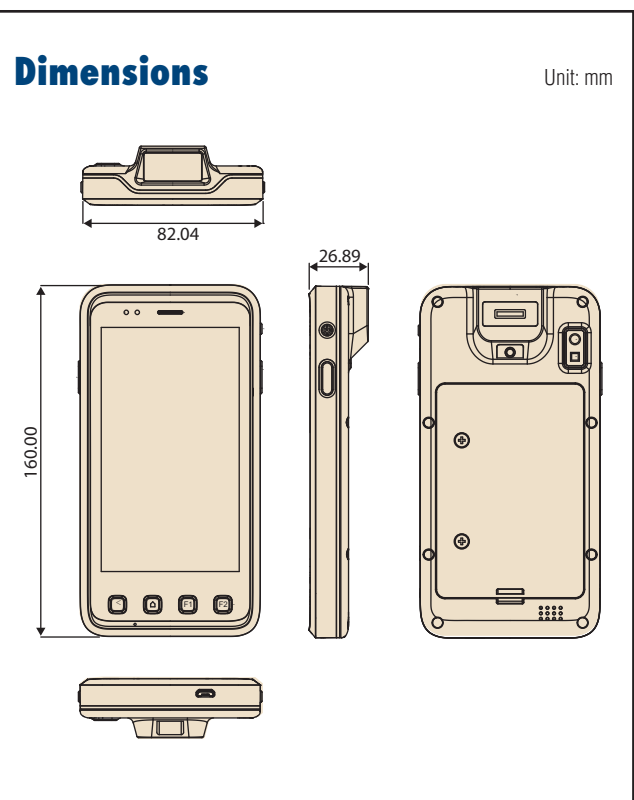
### Introduction

PWS-472 is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and a 5" HD (1280 x 720) capacitive touchscreen. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B, MIFARE®
	WWAN (Optional)*	LTE: B1, B3, B38, B39, B40, B41
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Scan Engine		Honeywell N3680 (LED aimer): PWS-472-C10E/C12; Zebra SE4750 (laser aimer): PWS-472-C13
Power System	Voltage Input	5V, 2A
	Battery	3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	82.04 x 160 x 26.89 mm (3.22 x 6.29 x 1.05 in)
	Weight	295 g (0.650 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65
	Safety	CB, CCC, BSMI
	Certifications	CE, FCC, CCC, BSMI, KC

\* WWAN not available in the USA.



### Ordering Information

Part Number	Configuration											
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	Barcode Scanner	OS
PWS-472-C10E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C12	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	N/A	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C13	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Zebra SE4750)	Android 5.1
PWS-472-C20E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Android 5.1

### Packing List

Description
1 x 3.7V 3200mAh lithium-polymer battery
1 x AC/DC adapter
1 x USB to micro USB cable
1 x Hand strap

# PWS-472 with Infrared Thermometer

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor and Infrared Thermometer



### Features

- Integrated infrared thermometer supports rapid temperature data collection and storage
- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) display with projected capacitive multi-touch control
- Screwless battery design for convenient swapping
- 1D/2D barcode scanner and 13-megapixel auto-focus camera for data collection
- Wi-Fi, Bluetooth, GPS, and BeiDou communication capabilities
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- IP65 rated for protection from water and dust

### Introduction

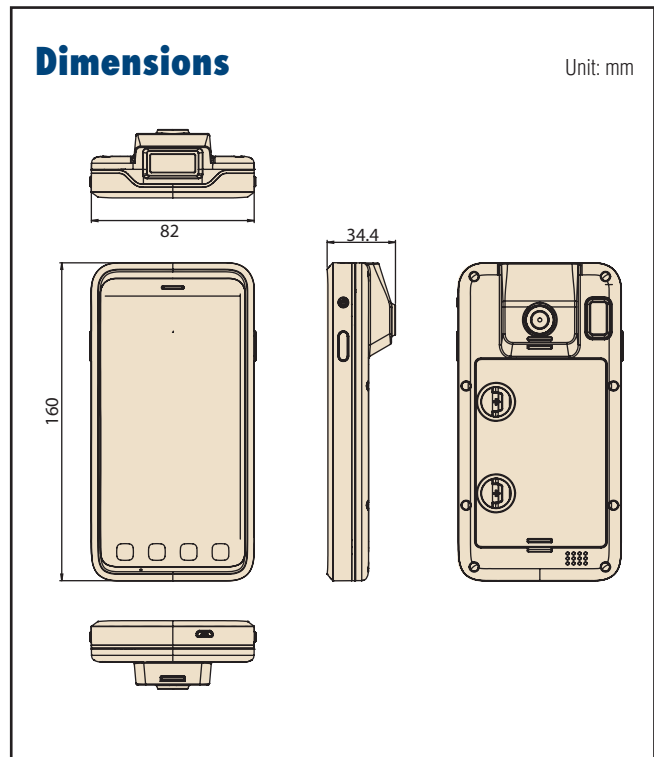
The PWS-472 with infrared thermometer is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and 5" HD (1280 x 720) projective capacitive touchscreen, as well as integrated infrared thermometer, which provides an effective tool for temperature management. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

Core	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	HD 1280 x 720
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive multi-touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-Compass, G-Sensor
	Standard I/O Port	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
I/O Interface	Button	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
	Wireless Communication	WLAN/Bluetooth: IEEE 802.11 a/b/g/n Bluetooth 4.0 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B MIFARE
	WWAN	LTE, B1, B3, B38, B39, B40, B41
IR Thermometer	Thermometer	Infrared thermometer
	Object Temperature Range	-40 ~ 120 °C (-40 ~ 248 °F)
	Temperature Accuracy	±1 °C (33.8 °F)
	Measurement Distance	< 30 cm (11.8 in)
GNSS	Satellite System	GPS, GLONASS, Galileo, BeiDou
	Power System	Voltage Input: 5V, 2A Battery: 3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	160 x 82 x 20 mm (6.2 x 3.22 x 0.78 in)
	Weight	302 g (0.66 lb) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65

### Dimensions

Unit: mm



### Ordering Information

Part Number	Configuration													
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	TMR	Barcode Scanner	OS	
PWS-472-C40	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (SE4750)	Android 5.1	

### Packing List

Part Number	Description
PWS-472-BAT100E	1 x 3.7V 3200mAh lithium-polymer battery
N/A	1 x Hand strap
N/A	1 x USB to Micro USB cable
N/A	1 x USB adapter

# PWS-472 UHF RFID Reader

5" Industrial-Grade Handheld Terminal with  
ARM® Cortex™-A53 Quad-Core Processor and  
UHF RFID Reader



## Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Communication capabilities includes Wi-Fi, Bluetooth, GPS, and BeiDou
- Built-in 13-megapixel auto-focus camera and 1D/2D barcode scanner
- Long-range UHF RFID capabilities (compatible with EPC C-1 G-2/ISO 18000-6C)
- User-friendly trigger button
- IP54 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C)

## Introduction

PWS-472 UHF RFID reader is designed for wireless long-range data collection. Compliant with EPC C-1 G-2/ISO18000-6C standards, the industrial-grade design is ideal for diverse warehouse, manufacturing, and logistics applications.

## Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m²
Touchscreen	Type	Capacitive touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	UHF RFID	Standard support: EPC C-1 G-2/ISO18000-6C Frequency range: 840 ~960 MHz Output power: 30dBm
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Power System	Voltage Input	5V, 2A
	Battery	3.7V 9600mAh lithium-polymer battery (Non swappable)
Mechanical	Dimensions (W x D x H)	160 x 150 x 80 mm (6.29 x 5.9 x 3.14 in)
	Weight	650 g (1.43 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP54
	Certification	By project request

## Ordering Information

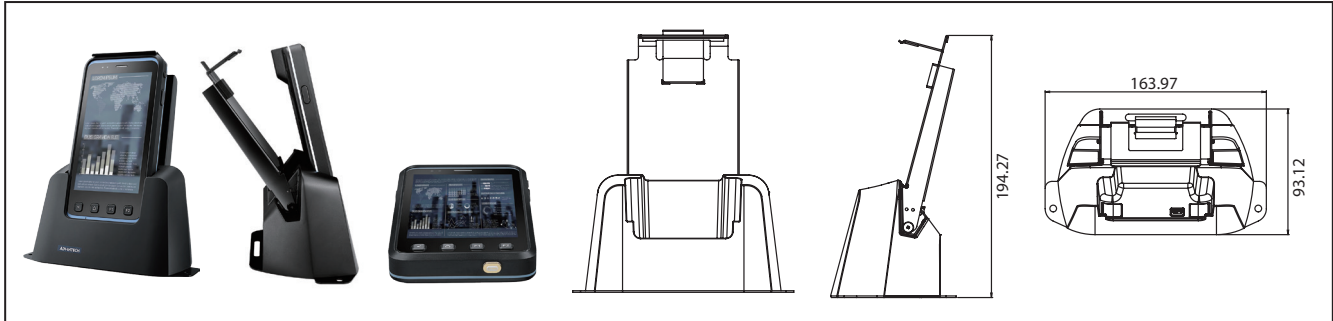
Part Number	Configuration												
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	UHF RFID	Barcode Scanner	OS
PWS-472-C30E	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes (Honeywell N3680)	Android 5.1

The UHF SKU is available upon request.



# PWS-472 Peripherals

## Docking Station



### Features

- Suitable for desktop and vehicle-mount installation
- Compliant with SAE J1455 standards for shock and vibration tolerance
- Dock with battery charger only
- Magnetic connector design for easy docking/undocking
- Power input: 5V/1A
- Operating temperature: -20 ~ 60 °C
- Dimensions: 163.97 x 93.12 x 194.27 mm (6.45 x 3.66 x 7.64 in)
- Weight: 450 g (0.99 lb)

## Tablet Holster



### Features

- Easy-access active pen /stylus holder
- Dimensions: 220 x 156 x 115 mm (8.66 x 6.14 x 4.52 in)
- Weight: 145 g (0.31 lb)
- Can be worn on the shoulder or waist

## Spare Battery



### Features

- Capacity: 3.7V/3200mAh
- Dimensions: 83 x 42 x 9 mm (3.26 x 1.65 x 0.35 in)
- Weight: 64 g (0.14 lb)

## Multi-Bay Battery Charger



### Features

- Charging time: 3 hr
- Charge status LED indicators
- Operating temperature: 0 ~ 40 °C
- Power input: 19V/3.42A, external adapter included
- Screw holes for table-top/wall-mount installation
- Dimensions: 250 x 112 x 20.7 mm (9.84 x 4.4 x 0.81 in)
- Weight: 420 g (0.92 lb)
- Supports up to 4 external batteries

## Ordering Information

Part Number	Description
PWS-470-VCRADLE00E	Docking station with battery charger only
PWS-472-BAT100E	3.7V/3200mAh lithium-polymer battery
PWS-472-BAG100E	Tablet holster
PWS-472-MBC100E	Multi-bay battery charger
1654013554-01	Micro USB magnetic male connector

Note: The PWS-472 peripherals do not support the PWS-472 UHF RFID reader.



# PWS-472

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor



### Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Lightweight design (295 g)
- IP65 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Wi-Fi, Bluetooth, GPS, BeiDou, and 4G LTE communication capabilities
- 13-megapixel auto-focus camera and optional 1D/2D barcode scanner



### Introduction

PWS-472 is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and a 5" HD (1280 x 720) capacitive touchscreen. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

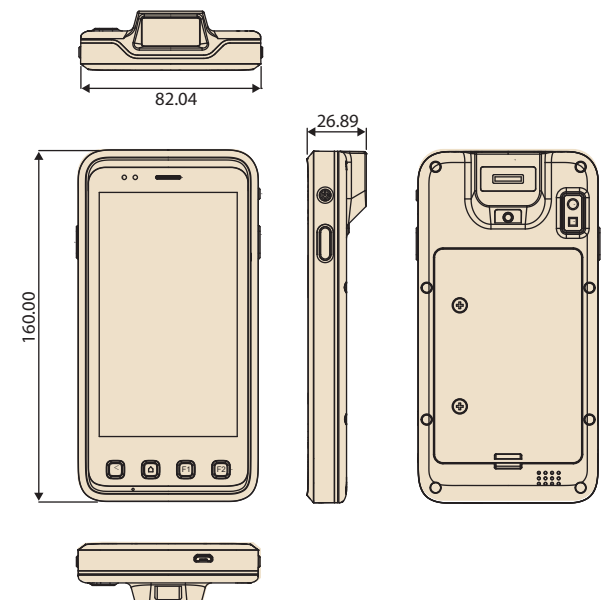
### Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B, MIFARE®
	WWAN (Optional)*	LTE: B1, B3, B38, B39, B40, B41
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Scan Engine		Honeywell N3680 (LED aimer): PWS-472-C10E/C12; Zebra SE4750 (laser aimer): PWS-472-C13
Power System	Voltage Input	5V, 2A
	Battery	3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	82.04 x 160 x 26.89 mm (3.22 x 6.29 x 1.05 in)
	Weight	295 g (0.650 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65
	Safety	CB, CCC, BSMI
	Certifications	CE, FCC, CCC, BSMI, KC

\* WWAN not available in the USA.

### Dimensions

Unit: mm



### Ordering Information

Part Number	Configuration											
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	Barcode Scanner	OS
PWS-472-C10E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C12	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	N/A	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C13	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Zebra SE4750)	Android 5.1
PWS-472-C20E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Android 5.1

### Packing List

Description
1 x 3.7V 3200mAh lithium-polymer battery
1 x AC/DC adapter
1 x USB to micro USB cable
1 x Hand strap



# PWS-472 with Infrared Thermometer

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor and Infrared Thermometer



### Features

- Integrated infrared thermometer supports rapid temperature data collection and storage
- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) display with projected capacitive multi-touch control
- Screwless battery design for convenient swapping
- 1D/2D barcode scanner and 13-megapixel auto-focus camera for data collection
- Wi-Fi, Bluetooth, GPS, and BeiDou communication capabilities
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- IP65 rated for protection from water and dust

### Introduction

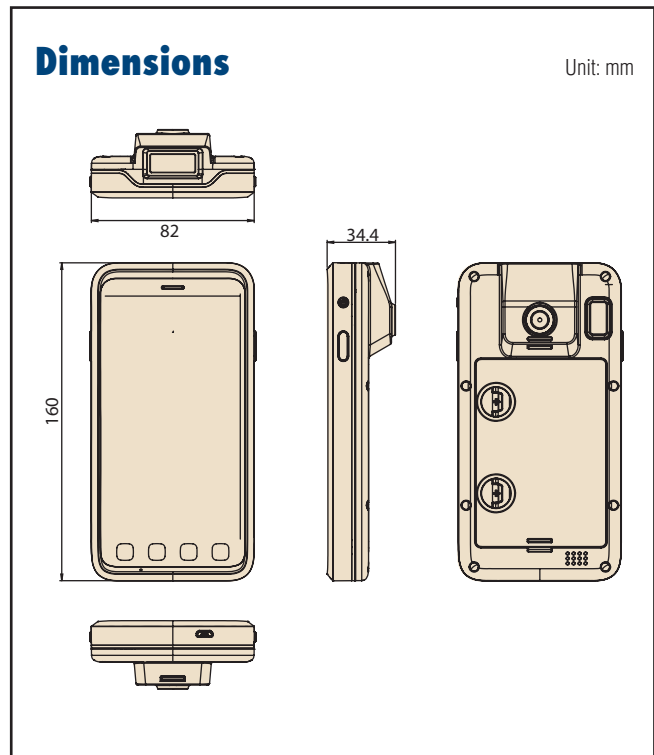
The PWS-472 with infrared thermometer is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and 5" HD (1280 x 720) projective capacitive touchscreen, as well as integrated infrared thermometer, which provides an effective tool for temperature management. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

Core	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz	
	Memory	2 GB	
	Operating System	Android 5.1	
Storage	Flash	16 GB	
	SD Card	MicroSD (up to 32 GB)	
Display	Type	5" IPS LCD	
	Resolution	HD 1280 x 720	
	Brightness	350 cd/m <sup>2</sup>	
Touchscreen	Type	Projective capacitive multi-touch	
	Construction	GFF	
Multimedia	Speaker	1 x Internal 1W speaker	
	Microphone	1 x Internal microphone	
Camera	Rear	1 x 13 MP camera with LED flash and auto focus	
Sensors		E-Compass, G-Sensor	
	Standard I/O Port	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM	
I/O Interface	Button	1 x Power button 2 x Scanner trigger buttons 4 x Function keys	
	Wireless Communication	WLAN/Bluetooth: IEEE 802.11 a/b/g/n Bluetooth 4.0 BLE NFC: Compatible with ISO 15693, ISO 14443A/B MIFARE WWAN: LTE, B1, B3, B38, B39, B40, B41	
	IR Thermometer	Thermometer	Infrared thermometer
		Object Temperature Range	-40 ~ 120 °C (-40 ~ 248 °F)
Temperature Accuracy		±1 °C (33.8 °F)	
GNSS	Measurement Distance	< 30 cm (11.8 in)	
	Satellite System	GPS, GLONASS, Galileo, BeiDou	
	Power System	Voltage Input: 5V, 2A Battery: 3.7V 3200mAh lithium-polymer battery (swappable)	
Mechanical	Dimensions (W x D x H)	160 x 82 x 20 mm (6.2 x 3.22 x 0.78 in)	
	Weight	302 g (0.66 lb) with battery	
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)	
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F	
	IP Rating	IP65	

### Dimensions

Unit: mm



### Ordering Information

Part Number	Configuration													
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	TMR	Barcode Scanner	OS	
PWS-472-C40	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (SE4750)	Android 5.1	

### Packing List

Part Number	Description
PWS-472-BAT100E	1 x 3.7V 3200mAh lithium-polymer battery
N/A	1 x Hand strap
N/A	1 x USB to Micro USB cable
N/A	1 x USB adapter

# PWS-472 UHF RFID Reader

5" Industrial-Grade Handheld Terminal with  
ARM® Cortex™-A53 Quad-Core Processor and  
UHF RFID Reader



## Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Communication capabilities includes Wi-Fi, Bluetooth, GPS, and BeiDou
- Built-in 13-megapixel auto-focus camera and 1D/2D barcode scanner
- Long-range UHF RFID capabilities (compatible with EPC C-1 G-2/ISO 18000-6C)
- User-friendly trigger button
- IP54 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C)

## Introduction

PWS-472 UHF RFID reader is designed for wireless long-range data collection. Compliant with EPC C-1 G-2/ISO18000-6C standards, the industrial-grade design is ideal for diverse warehouse, manufacturing, and logistics applications.

## Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m²
Touchscreen	Type	Capacitive touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	UHF RFID	Standard support: EPC C-1 G-2/ISO18000-6C Frequency range: 840 ~960 MHz Output power: 30dBm
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Power System	Voltage Input	5V, 2A
	Battery	3.7V 9600mAh lithium-polymer battery (Non swappable)
Mechanical	Dimensions (W x D x H)	160 x 150 x 80 mm (6.29 x 5.9 x 3.14 in)
	Weight	650 g (1.43 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP54
	Certification	By project request

## Ordering Information

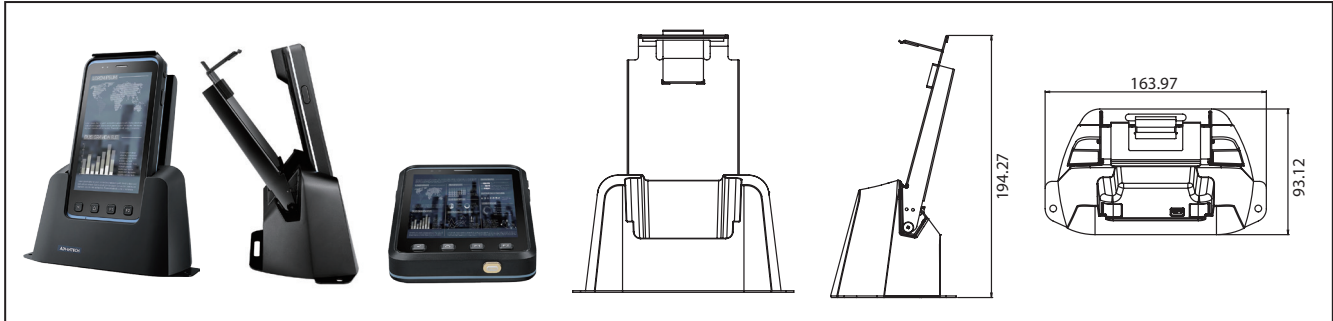
Part Number	Configuration												
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	UHF RFID	Barcode Scanner	OS
PWS-472-C30E	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes (Honeywell N3680)	Android 5.1

The UHF SKU is available upon request.



# PWS-472 Peripherals

## Docking Station



### Features

- Suitable for desktop and vehicle-mount installation
- Compliant with SAE J1455 standards for shock and vibration tolerance
- Dock with battery charger only
- Magnetic connector design for easy docking/undocking
- Power input: 5V/1A
- Operating temperature: -20 ~ 60 °C
- Dimensions: 163.97 x 93.12 x 194.27 mm (6.45 x 3.66 x 7.64 in)
- Weight: 450 g (0.99 lb)

## Tablet Holster



### Features

- Easy-access active pen /stylus holder
- Dimensions: 220 x 156 x 115 mm (8.66 x 6.14 x 4.52 in)
- Weight: 145 g (0.31 lb)
- Can be worn on the shoulder or waist

## Spare Battery



### Features

- Capacity: 3.7V/3200mAh
- Dimensions: 83 x 42 x 9 mm (3.26 x 1.65 x 0.35 in)
- Weight: 64 g (0.14 lb)

## Multi-Bay Battery Charger



### Features

- Charging time: 3 hr
- Charge status LED indicators
- Operating temperature: 0 ~ 40 °C
- Power input: 19V/3.42A, external adapter included
- Screw holes for table-top/wall-mount installation
- Dimensions: 250 x 112 x 20.7 mm (9.84 x 4.4 x 0.81 in)
- Weight: 420 g (0.92 lb)
- Supports up to 4 external batteries

## Ordering Information

Part Number	Description
PWS-470-VCRADLE00E	Docking station with battery charger only
PWS-472-BAT100E	3.7V/3200mAh lithium-polymer battery
PWS-472-BAG100E	Tablet holster
PWS-472-MBC100E	Multi-bay battery charger
1654013554-01	Micro USB magnetic male connector

Note: The PWS-472 peripherals do not support the PWS-472 UHF RFID reader.

# PWS-472

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor



### Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Lightweight design (295 g)
- IP65 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Wi-Fi, Bluetooth, GPS, BeiDou, and 4G LTE communication capabilities
- 13-megapixel auto-focus camera and optional 1D/2D barcode scanner



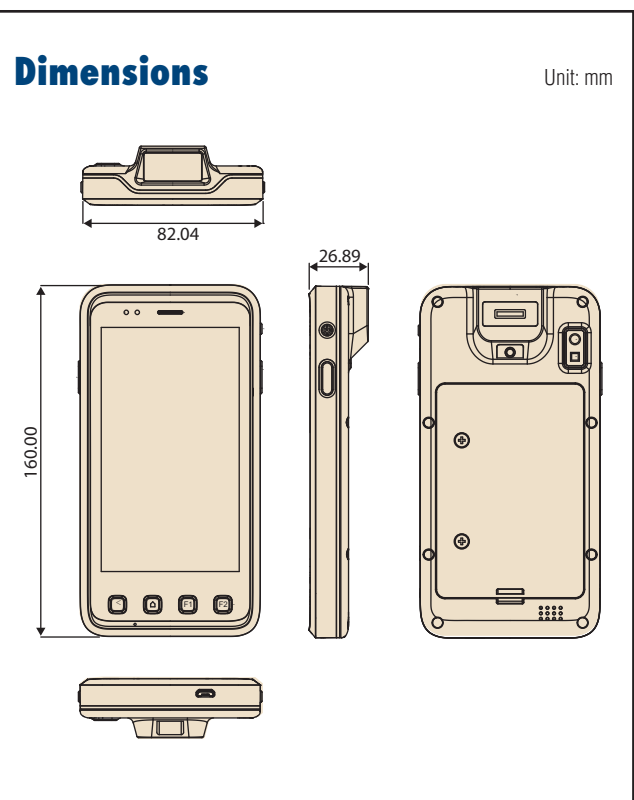
### Introduction

PWS-472 is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and a 5" HD (1280 x 720) capacitive touchscreen. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B, MIFARE®
	WWAN (Optional)*	LTE: B1, B3, B38, B39, B40, B41
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Scan Engine		Honeywell N3680 (LED aimer): PWS-472-C10E/C12; Zebra SE4750 (laser aimer): PWS-472-C13
Power System	Voltage Input	5V, 2A
	Battery	3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	82.04 x 160 x 26.89 mm (3.22 x 6.29 x 1.05 in)
	Weight	295 g (0.650 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65
	Safety	CB, CCC, BSMI
	Certifications	CE, FCC, CCC, BSMI, KC

\* WWAN not available in the USA.



### Ordering Information

Part Number	Configuration											
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	Barcode Scanner	OS
PWS-472-C10E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C12	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	N/A	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C13	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Zebra SE4750)	Android 5.1
PWS-472-C20E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Android 5.1

### Packing List

Description
1 x 3.7V 3200mAh lithium-polymer battery
1 x AC/DC adapter
1 x USB to micro USB cable
1 x Hand strap

# PWS-472 with Infrared Thermometer

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor and Infrared Thermometer



### Features

- Integrated infrared thermometer supports rapid temperature data collection and storage
- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) display with projected capacitive multi-touch control
- Screwless battery design for convenient swapping
- 1D/2D barcode scanner and 13-megapixel auto-focus camera for data collection
- Wi-Fi, Bluetooth, GPS, and BeiDou communication capabilities
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- IP65 rated for protection from water and dust

### Introduction

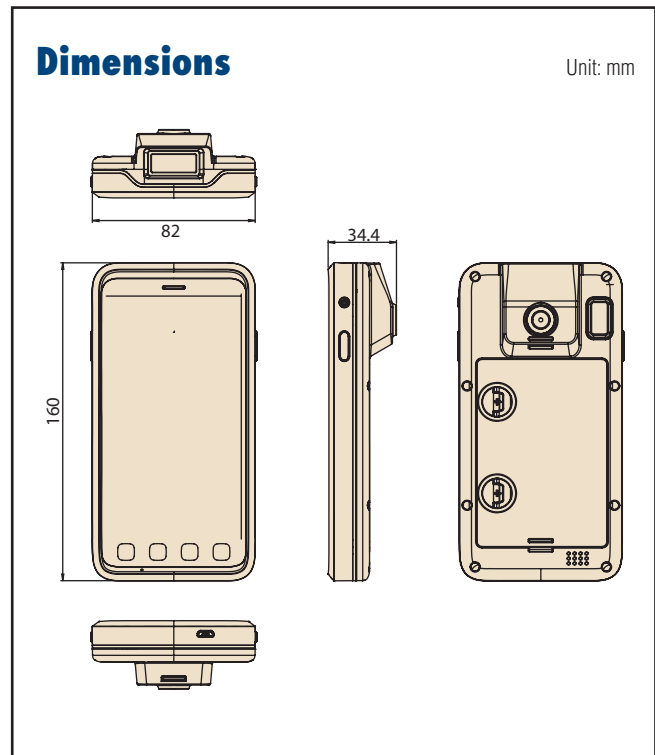
The PWS-472 with infrared thermometer is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and 5" HD (1280 x 720) projective capacitive touchscreen, as well as integrated infrared thermometer, which provides an effective tool for temperature management. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

Core	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz	
	Memory	2 GB	
	Operating System	Android 5.1	
Storage	Flash	16 GB	
	SD Card	MicroSD (up to 32 GB)	
Display	Type	5" IPS LCD	
	Resolution	HD 1280 x 720	
	Brightness	350 cd/m <sup>2</sup>	
Touchscreen	Type	Projective capacitive multi-touch	
	Construction	GFF	
Multimedia	Speaker	1 x Internal 1W speaker	
	Microphone	1 x Internal microphone	
Camera	Rear	1 x 13 MP camera with LED flash and auto focus	
Sensors		E-Compass, G-Sensor	
	Standard I/O Port	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM	
I/O Interface	Button	1 x Power button 2 x Scanner trigger buttons 4 x Function keys	
	Wireless Communication	WLAN/Bluetooth: IEEE 802.11 a/b/g/n Bluetooth 4.0 BLE NFC: Compatible with ISO 15693, ISO 14443A/B MIFARE WWAN: LTE, B1, B3, B38, B39, B40, B41	
	IR Thermometer	Thermometer	Infrared thermometer
		Object Temperature Range	-40 ~ 120 °C (-40 ~ 248 °F)
Temperature Accuracy		±1 °C (33.8 °F)	
GNSS	Satellite System	GPS, GLONASS, Galileo, BeiDou	
	Voltage Input	5V, 2A	
	Battery	3.7V 3200mAh lithium-polymer battery (swappable)	
Mechanical	Dimensions (W x D x H)	160 x 82 x 20 mm (6.2 x 3.22 x 0.78 in)	
	Weight	302 g (0.66 lb) with battery	
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)	
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F	
	IP Rating	IP65	

### Dimensions

Unit: mm



### Ordering Information

Part Number	Configuration													
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	TMR	Barcode Scanner	OS	
PWS-472-C40	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (SE4750)	Android 5.1	

### Packing List

Part Number	Description
PWS-472-BAT100E	1 x 3.7V 3200mAh lithium-polymer battery
N/A	1 x Hand strap
N/A	1 x USB to Micro USB cable
N/A	1 x USB adapter

# PWS-472 UHF RFID Reader

5" Industrial-Grade Handheld Terminal with  
ARM® Cortex™-A53 Quad-Core Processor and  
UHF RFID Reader



## Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Communication capabilities includes Wi-Fi, Bluetooth, GPS, and BeiDou
- Built-in 13-megapixel auto-focus camera and 1D/2D barcode scanner
- Long-range UHF RFID capabilities (compatible with EPC C-1 G-2/ISO 18000-6C)
- User-friendly trigger button
- IP54 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C)

## Introduction

PWS-472 UHF RFID reader is designed for wireless long-range data collection. Compliant with EPC C-1 G-2/ISO18000-6C standards, the industrial-grade design is ideal for diverse warehouse, manufacturing, and logistics applications.

## Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m²
Touchscreen	Type	Capacitive touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	UHF RFID	Standard support: EPC C-1 G-2/ISO18000-6C Frequency range: 840 ~960 MHz Output power: 30dBm
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Power System	Voltage Input	5V, 2A
	Battery	3.7V 9600mAh lithium-polymer battery (Non swappable)
Mechanical	Dimensions (W x D x H)	160 x 150 x 80 mm (6.29 x 5.9 x 3.14 in)
	Weight	650 g (1.43 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP54
	Certification	By project request

## Ordering Information

Part Number	Configuration												
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	UHF RFID	Barcode Scanner	OS
PWS-472-C30E	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes (Honeywell N3680)	Android 5.1

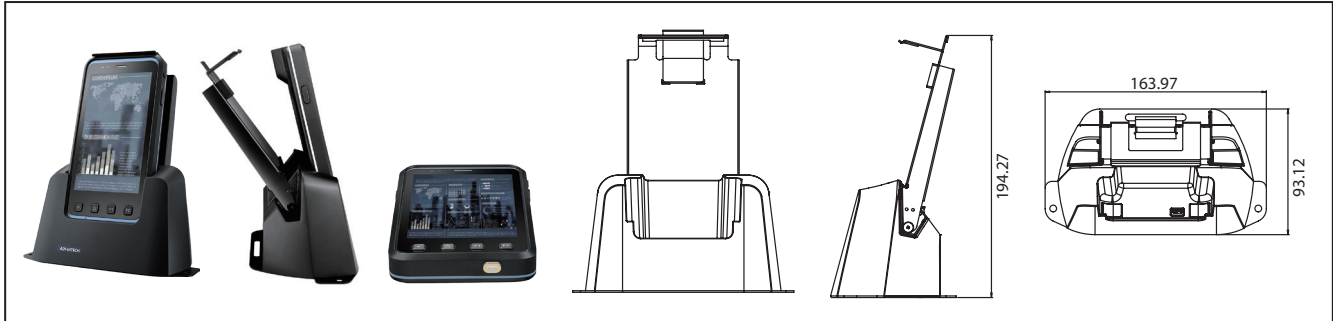
The UHF SKU is available upon request.





# PWS-472 Peripherals

## Docking Station



### Features

- Suitable for desktop and vehicle-mount installation
- Compliant with SAE J1455 standards for shock and vibration tolerance
- Dock with battery charger only
- Magnetic connector design for easy docking/undocking
- Power input: 5V/1A
- Operating temperature: -20 ~ 60 °C
- Dimensions: 163.97 x 93.12 x 194.27 mm (6.45 x 3.66 x 7.64 in)
- Weight: 450 g (0.99 lb)

## Tablet Holster



### Features

- Easy-access active pen /stylus holder
- Dimensions: 220 x 156 x 115 mm (8.66 x 6.14 x 4.52 in)
- Weight: 145 g (0.31 lb)
- Can be worn on the shoulder or waist

## Spare Battery



### Features

- Capacity: 3.7V/3200mAh
- Dimensions: 83 x 42 x 9 mm (3.26 x 1.65 x 0.35 in)
- Weight: 64 g (0.14 lb)

## Multi-Bay Battery Charger



### Features

- Charging time: 3 hr
- Charge status LED indicators
- Operating temperature: 0 ~ 40 °C
- Power input: 19V/3.42A, external adapter included
- Screw holes for table-top/wall-mount installation
- Dimensions: 250 x 112 x 20.7 mm (9.84 x 4.4 x 0.81 in)
- Weight: 420 g (0.92 lb)
- Supports up to 4 external batteries

## Ordering Information

Part Number	Description
PWS-470-VCRADLE00E	Docking station with battery charger only
PWS-472-BAT100E	3.7V/3200mAh lithium-polymer battery
PWS-472-BAG100E	Tablet holster
PWS-472-MBC100E	Multi-bay battery charger
1654013554-01	Micro USB magnetic male connector

Note: The PWS-472 peripherals do not support the PWS-472 UHF RFID reader.



# PWS-472

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor



### Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Lightweight design (295 g)
- IP65 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Wi-Fi, Bluetooth, GPS, BeiDou, and 4G LTE communication capabilities
- 13-megapixel auto-focus camera and optional 1D/2D barcode scanner



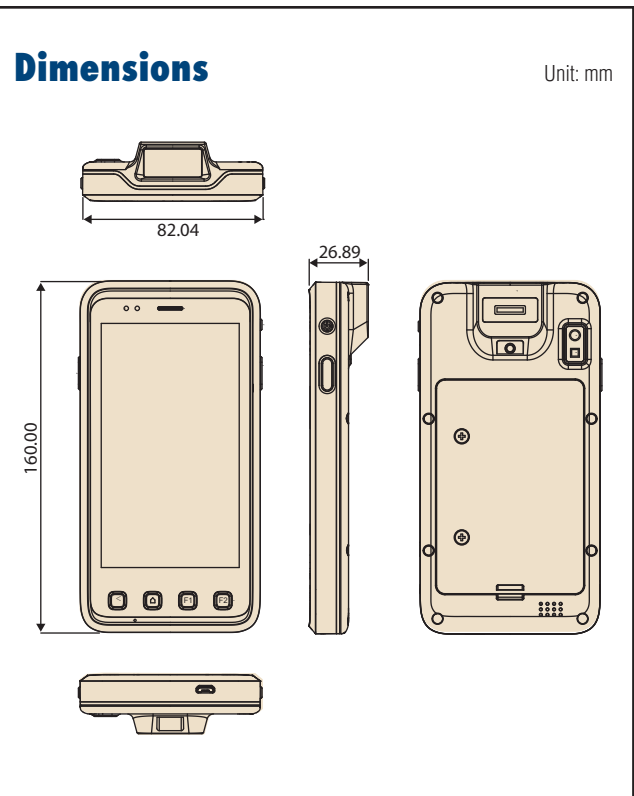
### Introduction

PWS-472 is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and a 5" HD (1280 x 720) capacitive touchscreen. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B, MIFARE®
	WWAN (Optional)*	LTE: B1, B3, B38, B39, B40, B41
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Scan Engine		Honeywell N3680 (LED aimer): PWS-472-C10E/C12; Zebra SE4750 (laser aimer): PWS-472-C13
Power System	Voltage Input	5V, 2A
	Battery	3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	82.04 x 160 x 26.89 mm (3.22 x 6.29 x 1.05 in)
	Weight	295 g (0.650 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65
	Safety	CB, CCC, BSMI
	Certifications	CE, FCC, CCC, BSMI, KC

\* WWAN not available in the USA.



### Ordering Information

Part Number	Configuration											
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	Barcode Scanner	OS
PWS-472-C10E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C12	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	N/A	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C13	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Zebra SE4750)	Android 5.1
PWS-472-C20E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Android 5.1

### Packing List

Description
1 x 3.7V 3200mAh lithium-polymer battery
1 x AC/DC adapter
1 x USB to micro USB cable
1 x Hand strap

# PWS-472 with Infrared Thermometer

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor and Infrared Thermometer



### Features

- Integrated infrared thermometer supports rapid temperature data collection and storage
- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) display with projected capacitive multi-touch control
- Screwless battery design for convenient swapping
- 1D/2D barcode scanner and 13-megapixel auto-focus camera for data collection
- Wi-Fi, Bluetooth, GPS, and BeiDou communication capabilities
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- IP65 rated for protection from water and dust

### Introduction

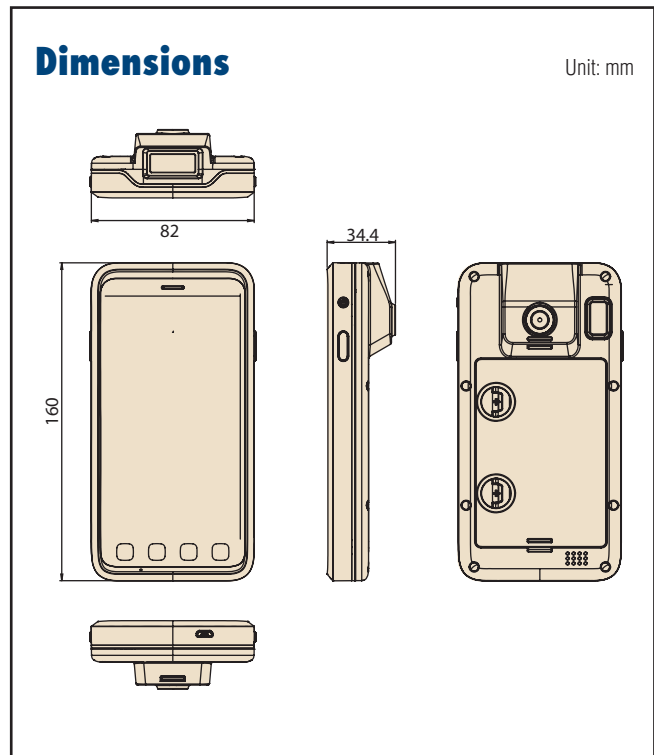
The PWS-472 with infrared thermometer is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and 5" HD (1280 x 720) projective capacitive touchscreen, as well as integrated infrared thermometer, which provides an effective tool for temperature management. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

Core	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz	
	Memory	2 GB	
	Operating System	Android 5.1	
Storage	Flash	16 GB	
	SD Card	MicroSD (up to 32 GB)	
Display	Type	5" IPS LCD	
	Resolution	HD 1280 x 720	
	Brightness	350 cd/m <sup>2</sup>	
Touchscreen	Type	Projective capacitive multi-touch	
	Construction	GFF	
Multimedia	Speaker	1 x Internal 1W speaker	
	Microphone	1 x Internal microphone	
Camera	Rear	1 x 13 MP camera with LED flash and auto focus	
Sensors		E-Compass, G-Sensor	
	Standard I/O Port	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM	
I/O Interface	Button	1 x Power button 2 x Scanner trigger buttons 4 x Function keys	
	Wireless Communication	WLAN/Bluetooth: IEEE 802.11 a/b/g/n Bluetooth 4.0 BLE NFC: Compatible with ISO 15693, ISO 14443A/B MIFARE WWAN: LTE, B1, B3, B38, B39, B40, B41	
	IR Thermometer	Thermometer	Infrared thermometer
		Object Temperature Range	-40 ~ 120 °C (-40 ~ 248 °F)
Temperature Accuracy		±1 °C (33.8 °F)	
GNSS	Measurement Distance	< 30 cm (11.8 in)	
	Satellite System	GPS, GLONASS, Galileo, BeiDou	
	Power System	Voltage Input: 5V, 2A Battery: 3.7V 3200mAh lithium-polymer battery (swappable)	
Mechanical	Dimensions (W x D x H)	160 x 82 x 20 mm (6.2 x 3.22 x 0.78 in)	
	Weight	302 g (0.66 lb) with battery	
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)	
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F	
	IP Rating	IP65	

### Dimensions

Unit: mm



### Ordering Information

Part Number	Configuration													
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	TMR	Barcode Scanner	OS	
PWS-472-C40	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (SE4750)	Android 5.1	

### Packing List

Part Number	Description
PWS-472-BAT100E	1 x 3.7V 3200mAh lithium-polymer battery
N/A	1 x Hand strap
N/A	1 x USB to Micro USB cable
N/A	1 x USB adapter

# PWS-472 UHF RFID Reader

5" Industrial-Grade Handheld Terminal with  
ARM® Cortex™-A53 Quad-Core Processor and  
UHF RFID Reader



## Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Communication capabilities includes Wi-Fi, Bluetooth, GPS, and BeiDou
- Built-in 13-megapixel auto-focus camera and 1D/2D barcode scanner
- Long-range UHF RFID capabilities (compatible with EPC C-1 G-2/ISO 18000-6C)
- User-friendly trigger button
- IP54 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C)

## Introduction

PWS-472 UHF RFID reader is designed for wireless long-range data collection. Compliant with EPC C-1 G-2/ISO18000-6C standards, the industrial-grade design is ideal for diverse warehouse, manufacturing, and logistics applications.

## Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m²
Touchscreen	Type	Capacitive touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	UHF RFID	Standard support: EPC C-1 G-2/ISO18000-6C Frequency range: 840 ~960 MHz Output power: 30dBm
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Power System	Voltage Input	5V, 2A
	Battery	3.7V 9600mAh lithium-polymer battery (Non swappable)
Mechanical	Dimensions (W x D x H)	160 x 150 x 80 mm (6.29 x 5.9 x 3.14 in)
	Weight	650 g (1.43 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP54
	Certification	By project request

## Ordering Information

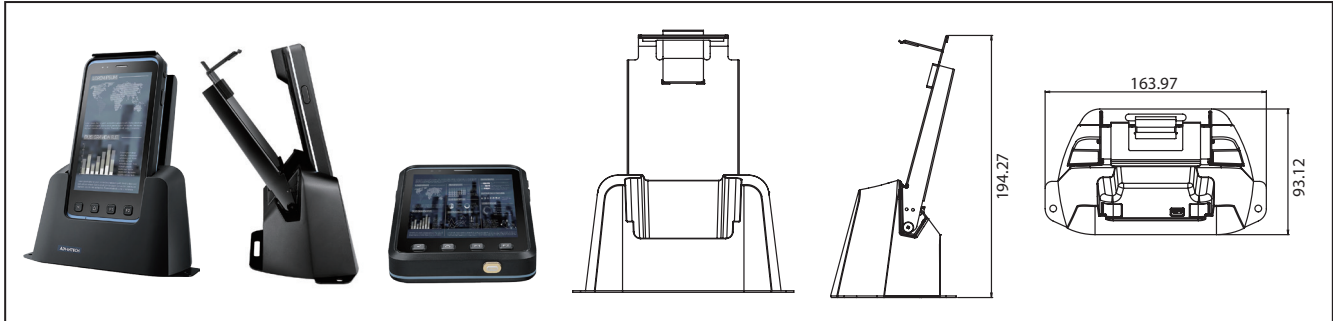
Part Number	Configuration												
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	UHF RFID	Barcode Scanner	OS
PWS-472-C30E	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes (Honeywell N3680)	Android 5.1

The UHF SKU is available upon request.



# PWS-472 Peripherals

## Docking Station



### Features

- Suitable for desktop and vehicle-mount installation
- Compliant with SAE J1455 standards for shock and vibration tolerance
- Dock with battery charger only
- Magnetic connector design for easy docking/undocking
- Power input: 5V/1A
- Operating temperature: -20 ~ 60 °C
- Dimensions: 163.97 x 93.12 x 194.27 mm (6.45 x 3.66 x 7.64 in)
- Weight: 450 g (0.99 lb)

## Tablet Holster



### Features

- Easy-access active pen /stylus holder
- Dimensions: 220 x 156 x 115 mm (8.66 x 6.14 x 4.52 in)
- Weight: 145 g (0.31 lb)
- Can be worn on the shoulder or waist

## Spare Battery



### Features

- Capacity: 3.7V/3200mAh
- Dimensions: 83 x 42 x 9 mm (3.26 x 1.65 x 0.35 in)
- Weight: 64 g (0.14 lb)

## Multi-Bay Battery Charger



### Features

- Charging time: 3 hr
- Charge status LED indicators
- Operating temperature: 0 ~ 40 °C
- Power input: 19V/3.42A, external adapter included
- Screw holes for table-top/wall-mount installation
- Dimensions: 250 x 112 x 20.7 mm (9.84 x 4.4 x 0.81 in)
- Weight: 420 g (0.92 lb)
- Supports up to 4 external batteries

## Ordering Information

Part Number	Description
PWS-470-VCRADLE00E	Docking station with battery charger only
PWS-472-BAT100E	3.7V/3200mAh lithium-polymer battery
PWS-472-BAG100E	Tablet holster
PWS-472-MBC100E	Multi-bay battery charger
1654013554-01	Micro USB magnetic male connector

Note: The PWS-472 peripherals do not support the PWS-472 UHF RFID reader.

# PWS-472

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor



### Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Lightweight design (295 g)
- IP65 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- Wi-Fi, Bluetooth, GPS, BeiDou, and 4G LTE communication capabilities
- 13-megapixel auto-focus camera and optional 1D/2D barcode scanner



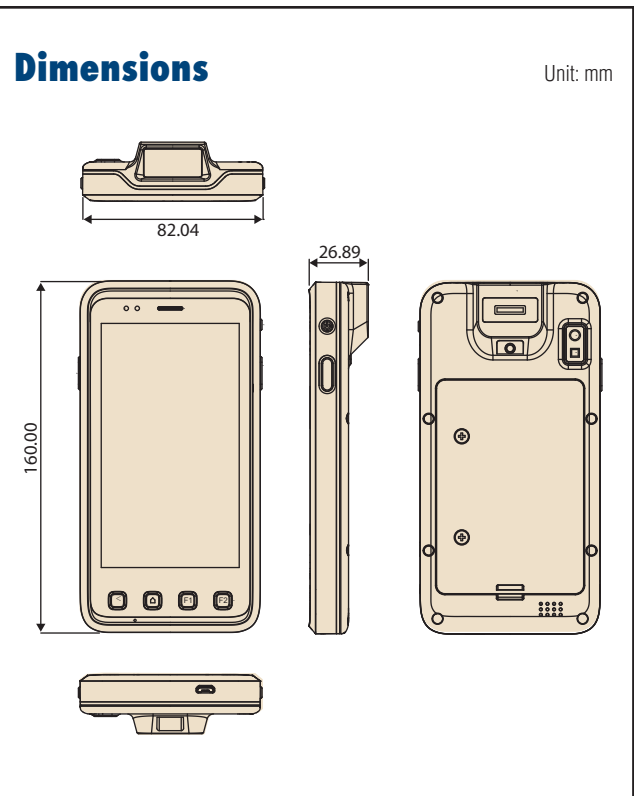
### Introduction

PWS-472 is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and a 5" HD (1280 x 720) capacitive touchscreen. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B, MIFARE®
	WWAN (Optional)*	LTE: B1, B3, B38, B39, B40, B41
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Scan Engine		Honeywell N3680 (LED aimer): PWS-472-C10E/C12; Zebra SE4750 (laser aimer): PWS-472-C13
Power System	Voltage Input	5V, 2A
	Battery	3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	82.04 x 160 x 26.89 mm (3.22 x 6.29 x 1.05 in)
	Weight	295 g (0.650 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65
	Safety	CB, CCC, BSMI
	Certifications	CE, FCC, CCC, BSMI, KC

\* WWAN not available in the USA.



### Ordering Information

Part Number	Configuration											
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	Barcode Scanner	OS
PWS-472-C10E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C12	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	N/A	Yes	Yes (Honeywell N3680)	Android 5.1
PWS-472-C13	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Zebra SE4750)	Android 5.1
PWS-472-C20E	Cortex-A53	5"	2GB	16GB	Yes	Yes	Yes	Yes	Yes	Yes	N/A	Android 5.1

### Packing List

Description
1 x 3.7V 3200mAh lithium-polymer battery
1 x AC/DC adapter
1 x USB to micro USB cable
1 x Hand strap

# PWS-472 with Infrared Thermometer

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor and Infrared Thermometer



### Features

- Integrated infrared thermometer supports rapid temperature data collection and storage
- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) display with projected capacitive multi-touch control
- Screwless battery design for convenient swapping
- 1D/2D barcode scanner and 13-megapixel auto-focus camera for data collection
- Wi-Fi, Bluetooth, GPS, and BeiDou communication capabilities
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- IP65 rated for protection from water and dust

### Introduction

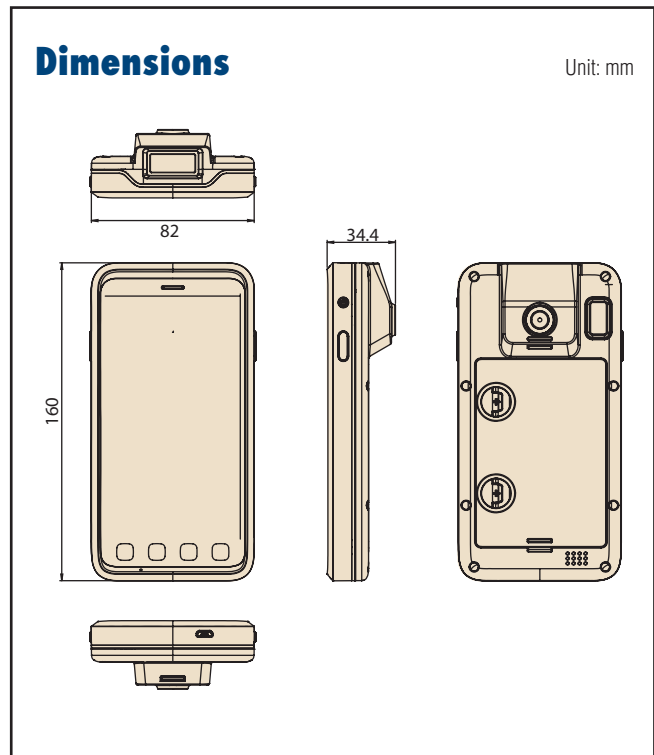
The PWS-472 with infrared thermometer is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and 5" HD (1280 x 720) projective capacitive touchscreen, as well as integrated infrared thermometer, which provides an effective tool for temperature management. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

Core	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	HD 1280 x 720
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive multi-touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-Compass, G-Sensor
	Standard I/O Port	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
I/O Interface	Button	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
	Wireless Communication	WLAN/Bluetooth: IEEE 802.11 a/b/g/n Bluetooth 4.0 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B MIFARE
	WWAN	LTE, B1, B3, B38, B39, B40, B41
IR Thermometer	Thermometer	Infrared thermometer
	Object Temperature Range	-40 ~ 120 °C (-40 ~ 248 °F)
	Temperature Accuracy	±1 °C (33.8 °F)
	Measurement Distance	< 30 cm (11.8 in)
GNSS	Satellite System	GPS, GLONASS, Galileo, BeiDou
	Power System	Voltage Input: 5V, 2A Battery: 3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	160 x 82 x 20 mm (6.2 x 3.22 x 0.78 in)
	Weight	302 g (0.66 lb) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65

### Dimensions

Unit: mm



### Ordering Information

Part Number	Configuration													
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	TMR	Barcode Scanner	OS	
PWS-472-C40	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (SE4750)	Android 5.1	

### Packing List

Part Number	Description
PWS-472-BAT100E	1 x 3.7V 3200mAh lithium-polymer battery
N/A	1 x Hand strap
N/A	1 x USB to Micro USB cable
N/A	1 x USB adapter



# PWS-472 UHF RFID Reader

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UHF RFID Reader



## Features

- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) capacitive touchscreen
- Communication capabilities includes Wi-Fi, Bluetooth, GPS, and BeiDou
- Built-in 13-megapixel auto-focus camera and 1D/2D barcode scanner
- Long-range UHF RFID capabilities (compatible with EPC C-1 G-2/ISO 18000-6C)
- User-friendly trigger button
- IP54 rated for protection from water and dust
- Wide operating temperature range (-20 ~ 60 °C)

## Introduction

PWS-472 UHF RFID reader is designed for wireless long-range data collection. Compliant with EPC C-1 G-2/ISO18000-6C standards, the industrial-grade design is ideal for diverse warehouse, manufacturing, and logistics applications.

## Specifications

System	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	1280 x 720 HD
	Brightness	350 cd/m²
Touchscreen	Type	Capacitive touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-compass, g-sensor, light sensor
I/O	I/O Ports	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Buttons	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth V4.1 BLE
	UHF RFID	Standard support: EPC C-1 G-2/ISO18000-6C Frequency range: 840 ~960 MHz Output power: 30dBm
GNSS	Satellite System	GPS, GLONASS, Galileo, and BeiDou
Power System	Voltage Input	5V, 2A
	Battery	3.7V 9600mAh lithium-polymer battery (Non swappable)
Mechanical	Dimensions (W x D x H)	160 x 150 x 80 mm (6.29 x 5.9 x 3.14 in)
	Weight	650 g (1.43 lbs) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP54
	Certification	By project request

## Ordering Information

Part Number	Configuration												
	CPU	LCD	Memory	Storage	Rear CAM	Wi-Fi	BT	GNSS	4G	NFC	UHF RFID	Barcode Scanner	OS
PWS-472-C30E	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	N/A	N/A	Yes	Yes (Honeywell N3680)	Android 5.1

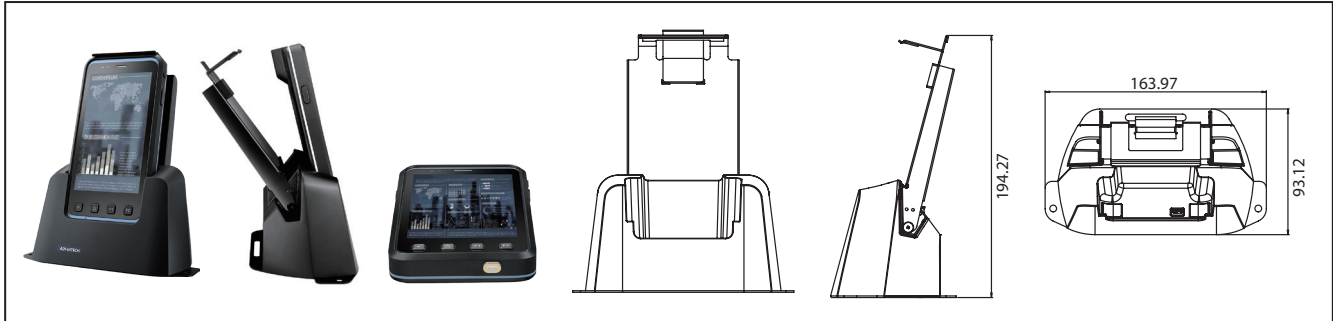
The UHF SKU is available upon request.





# PWS-472 Peripherals

## Docking Station



### Features

- Suitable for desktop and vehicle-mount installation
- Compliant with SAE J1455 standards for shock and vibration tolerance
- Dock with battery charger only
- Magnetic connector design for easy docking/undocking
- Power input: 5V/1A
- Operating temperature: -20 ~ 60 °C
- Dimensions: 163.97 x 93.12 x 194.27 mm (6.45 x 3.66 x 7.64 in)
- Weight: 450 g (0.99 lb)

## Tablet Holster



### Features

- Easy-access active pen /stylus holder
- Dimensions: 220 x 156 x 115 mm (8.66 x 6.14 x 4.52 in)
- Weight: 145 g (0.31 lb)
- Can be worn on the shoulder or waist

## Spare Battery



### Features

- Capacity: 3.7V/3200mAh
- Dimensions: 83 x 42 x 9 mm (3.26 x 1.65 x 0.35 in)
- Weight: 64 g (0.14 lb)

## Multi-Bay Battery Charger



### Features

- Charging time: 3 hr
- Charge status LED indicators
- Operating temperature: 0 ~ 40 °C
- Power input: 19V/3.42A, external adapter included
- Screw holes for table-top/wall-mount installation
- Dimensions: 250 x 112 x 20.7 mm (9.84 x 4.4 x 0.81 in)
- Weight: 420 g (0.92 lb)
- Supports up to 4 external batteries

## Ordering Information

Part Number	Description
PWS-470-VCRADLE00E	Docking station with battery charger only
PWS-472-BAT100E	3.7V/3200mAh lithium-polymer battery
PWS-472-BAG100E	Tablet holster
PWS-472-MBC100E	Multi-bay battery charger
1654013554-01	Micro USB magnetic male connector

Note: The PWS-472 peripherals do not support the PWS-472 UHF RFID reader.

# PWS-472 with Infrared Thermometer

## 5" Industrial-Grade Handheld Terminal with ARM® Cortex™-A53 Quad-Core Processor and Infrared Thermometer



### Features

- Integrated infrared thermometer supports rapid temperature data collection and storage
- ARM® Cortex™-A53, quad-core, 1.3 GHz processor with Android 5.1
- 5" HD (1280 x 720) display with projected capacitive multi-touch control
- Screwless battery design for convenient swapping
- 1D/2D barcode scanner and 13-megapixel auto-focus camera for data collection
- Wi-Fi, Bluetooth, GPS, and BeiDou communication capabilities
- Wide operating temperature range (-20 ~ 60 °C/-4 ~ 140 °F)
- IP65 rated for protection from water and dust

### Introduction

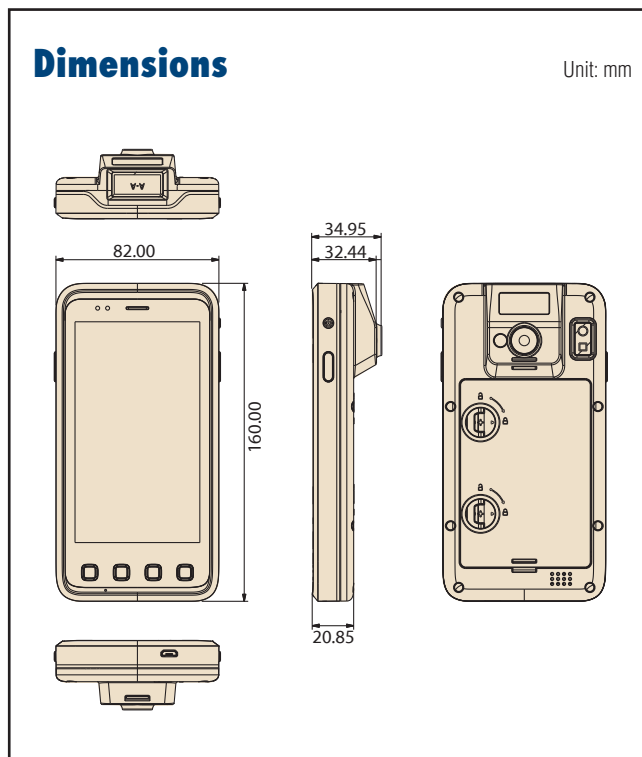
The PWS-472 with infrared thermometer is an industrial-grade handheld terminal equipped with an ARM® Cortex™-A53, quad-core, 1.3 GHz processor and 5" HD (1280 x 720) projective capacitive touchscreen, as well as integrated infrared thermometer, which provides an effective tool for temperature management. The inclusion of Wi-Fi (802.11 a/b/g/n), Bluetooth, GPS, and WWAN communication technologies ensures high connectivity, while the 1D/2D barcode scanner and 13-megapixel camera with auto-focus provide convenient data collection tools. To withstand operation in harsh environments, PWS-472 is IP65 rated for protection from water and dust ingress, making it ideal for retail, warehouse, and manufacturing applications.

### Specifications

Core	Processor	ARM® Cortex™-A53, quad-core, 1.3 GHz
	Memory	2 GB
	Operating System	Android 5.1
Storage	Flash	16 GB
	SD Card	MicroSD (up to 32 GB)
Display	Type	5" IPS LCD
	Resolution	HD 1280 x 720
	Brightness	350 cd/m <sup>2</sup>
Touchscreen	Type	Projective capacitive multi-touch
	Construction	GFF
Multimedia	Speaker	1 x Internal 1W speaker
	Microphone	1 x Internal microphone
Camera	Rear	1 x 13 MP camera with LED flash and auto focus
Sensors		E-Compass, G-Sensor
I/O Interface	Standard I/O Port	1 x Micro USB 2.0 client (via charging cable) 1 x Standard SIM
	Button	1 x Power button 2 x Scanner trigger buttons 4 x Function keys
Wireless Communication	WLAN/Bluetooth	IEEE 802.11 a/b/g/n Bluetooth 4.0 BLE
	NFC	Compatible with ISO 15693, ISO 14443A/B MIFARE
	WWAN	LTE, B1, B3, B38, B39, B40, B41
IR Thermometer	Thermometer	Infrared thermometer
	Object Temperature Range	-40 ~ 120 °C (-40 ~ 248 °F)
	Temperature Accuracy	±2 °C (35.6 °F)
	Measurement Distance	< 30 cm (11.8 in)
GNSS	Satellite System	GPS, GLONASS, Galileo, BeiDou
Power System	Voltage Input	5V, 2A
	Battery	3.7V 3200mAh lithium-polymer battery (swappable)
Mechanical	Dimensions (W x D x H)	160 x 82 x 34.95 mm (6.2 x 3.22 x 1.38 in)
	Weight	302 g (0.66 lb) with battery
Environment	Operating Temperature	-20 ~ 60 °C/-4 ~ 140 °F (0 ~ 40 °C/32 ~ 104 °F when charging)
	Storage Temperature	-30 ~ 70 °C/-22 ~ 158 °F
	IP Rating	IP65

### Dimensions

Unit: mm



### Ordering Information

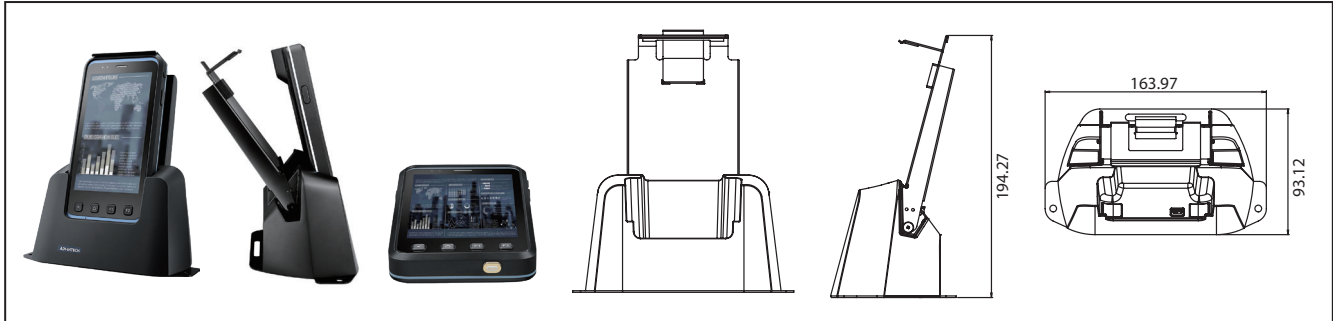
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PWS-472-C40	Cortex-A53	5"	2 GB	16 GB	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (SE4750)	Android 5.1

### Packing List

Part Number	Description
PWS-472-BAT100E	1 x 3.7V 3200mAh lithium-polymer battery
N/A	1 x Hand strap
N/A	1 x USB to Micro USB cable
N/A	1 x USB adapter

# PWS-472 Peripherals

## Docking Station



### Features

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- Weight: 420 g (0.92 lb)
- Supports up to 4 external batteries
- Power cord is optional

## Ordering Information

Part Number	Description
PWS-470-VCRADLE00E	Docking station with battery charger only
PWS-472-BAT100E	3.7V/3200mAh lithium-polymer battery
PWS-472-BAG100E	Tablet holster
PWS-472-MBC100E	Multi-bay battery charger
1654013554-01	Micro USB magnetic male connector
1700001524	Power cord of multi-bay battery charger (USA) UL 3P 10A 125V 183 cm
1700008921	Power cord of multi-bay battery charger (Japan) PSE 3P 7A 125V 183 cm
1700019146	Power cord of multi-bay battery charger (China) CCC 3P 10A 250V 183 cm
1700018553	Power cord of multi-bay battery charger (NZ/AU) SAA 3P 10A 250V 183 cm
170203180A	Power cord of multi-bay battery charger (UK) BSI 3P 10A 250V 183 cm
170203183C	Power cord of multi-bay battery charger (EU) 3P 2.5A 250V 183 cm

Note: The PWS-472 peripherals do not support the PWS-472 UHF RFID reader.