

AIM-78S

10.1" Industrial Tablet with Qualcomm Processor



Features

- Equipped with DeviceOn/iService software for remote device management
- Qualcomm SDA660/SDM660 with Android 10/Android 13
- 10" WUXGA full HD display with scratch-resistant Corning® Gorilla® Glass and multi-touch PCAP control supports glove mode
- Integrated barcode scanner supports data collection
- Fast roaming and dual band WLAN , BT 5.0, NFC, 4G LTE connectivity for seamless communications
- Optional extension include 1D/2D barcode scanner, LAN+COM module, UHF RFID module
- Certified with SOTI

DeviceOn Qualcomm CE FCC UL

Introduction

AIM-78S is an industrial grade tablet for vertical markets of manufacturing, warehousing management, field service. Features with 6 hours battery life, integrated barcode scanner, high brightness LCD and IP65. The WIFI/LTE connectivity brings the mobility to users, and plus the extension and docking peripheral. AIM-78S is suitable to use in indoor and outdoor environment.

Moreover, AIM-78S 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

System	Processor	Qualcomm SDM660 (up to 2.2GHz)
	Memory	4 GB LPDDR4x
	OS	Android 10, Android 13
	Certified 3rd Party Software	Certified with SOTI for Android 10
Storage	eMMC	64 GB
	Micro-SD	Support (up to 2TB)
Display	Type	10.1" FHD LCD
	Resolution	WUXGA 1920 x 1200
	Brightness	800 cd/m ²
	Touch Type	10-point multi-touch P-CAP touch control
	Glass Type	Corning® Gorilla® Glass 3
Communication	WLAN	IEEE 802.11 a/b/g/n/ac/k/v/r
	Bluetooth	Bluetooth® v5.0 + BLE
	WWAN (Optional)	4G LTE multi-device broadband
	NFC	13.56 MHz, compatible with ISO15693, ISO14443A, ISO 14443B, FeliCa
Connectivity	Standard I/O	1 x USB3.1 Type C supporting data transmission and USB tethering, 1 x USB 2.0 Type A, 1 x Combo audio jack, 1 x 19 VDC-in jack, 1 x SIM card reader, 1 x micro SD card
		1 x AIM extension 14-pin pogo connector: 1 x USB 2.0, 1 x 2-wire UART, 5V/1A power
	Docking	1 x AIM docking 16-pin pogo connector: 1 x USB 3.0, 12V power
	Speaker	2 x Internal speakers (2 W)
	Audio	1 x Audio combo jack (combines stereo audio output and mono microphone input)
Camera	Front	8.0-megapixel fixed-focus camera
	Rear	13.0-megapixel auto-focus camera with LED flash
Sensors		Ambient Light Sensor, e-Compass, G-sensor, Gyroscope
Barcode Scanner(Optional)		Integrated 1D/2D barcode scanner
Control Buttons		1 x Power button, 2 x volume keys (up/down), 1 x programmable function key
System Indicator		Full: green (100%); Charging: blue; Low: Orange (≤10%)
Power System	Input Voltage	DC jack: 19V/3.42A Docking pogo: 12V/2A
		Swappable battery with capacity LED indicators; 10.8V, 2400 mAh, 26 WHr
	Battery	Operating time: Approximately 6 hr (depending on usage scenario*) Charging time: < 3 hr

Specifications (Cont.)

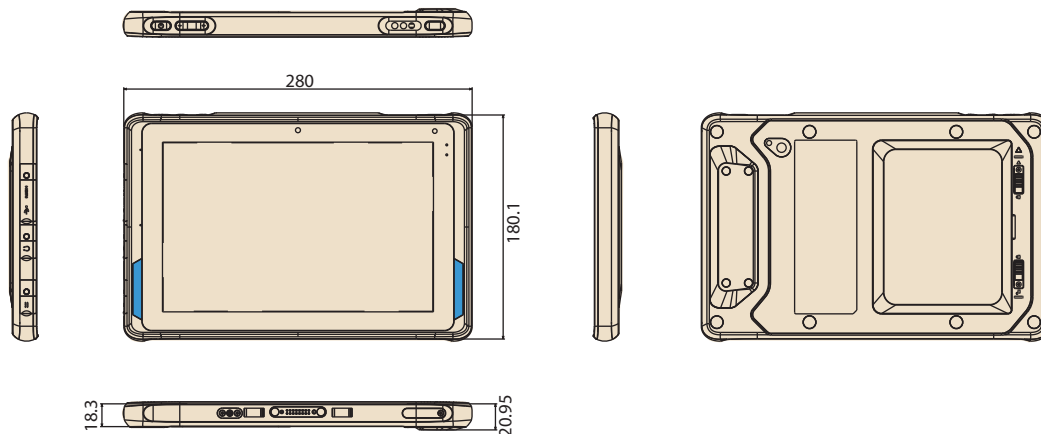
Environment	Operating Temperature	-10 ~ 50 °C (14 ~ 122 °F)
	Storage Temperature	-20 ~ 60 °C (-4 ~ 140°F)
	IP Rating	IP65
	Shock	Operating: 10 ~ 20 G, 11 ms; Non-operating: 50 G, 11 ms
	Vibration	Operating: (5 ~ 500 Hz) 0.5 ~ 1 G; Non-operating: (5 ~ 500 Hz) 0.04 PSD
	Humidity	Operating: 10 ~ 90% @ 40 °C non-condensing Storage: -10 ~ 95% non-condensing
	Drop Tested	Up to 120 cm (4 ft) onto plywood over concrete
Physical Characteristics	Dimension (W x D x H)	280 x 18.3 x 180.1 mm (11 x 0.7 x 7.1 in)
	Weight	980 g (2.2 lb)
	Color	Dark Grey
Certifications		FCC, CE, CB, UL, TELEC, VCCI, BSMI, NCC, CCC, SRRC, RCM, IC
DeviceOn/iService Remote Device Management	Operating System	Android 10, Android 13
	Common Controls (Reboot, Shutdown)	V
	Device-Specific Controls (Audio, Backlight)	V
	Connection Status	V
	Hardware Status	V*
	Batch Operation Support	V
	OTA Storage Management	Local blob
	APP OTA Updates	V
	Software Watchlist	V
	Software Start/Stop	V
	Peripherals Watchlist	V*

*Dependant on device model

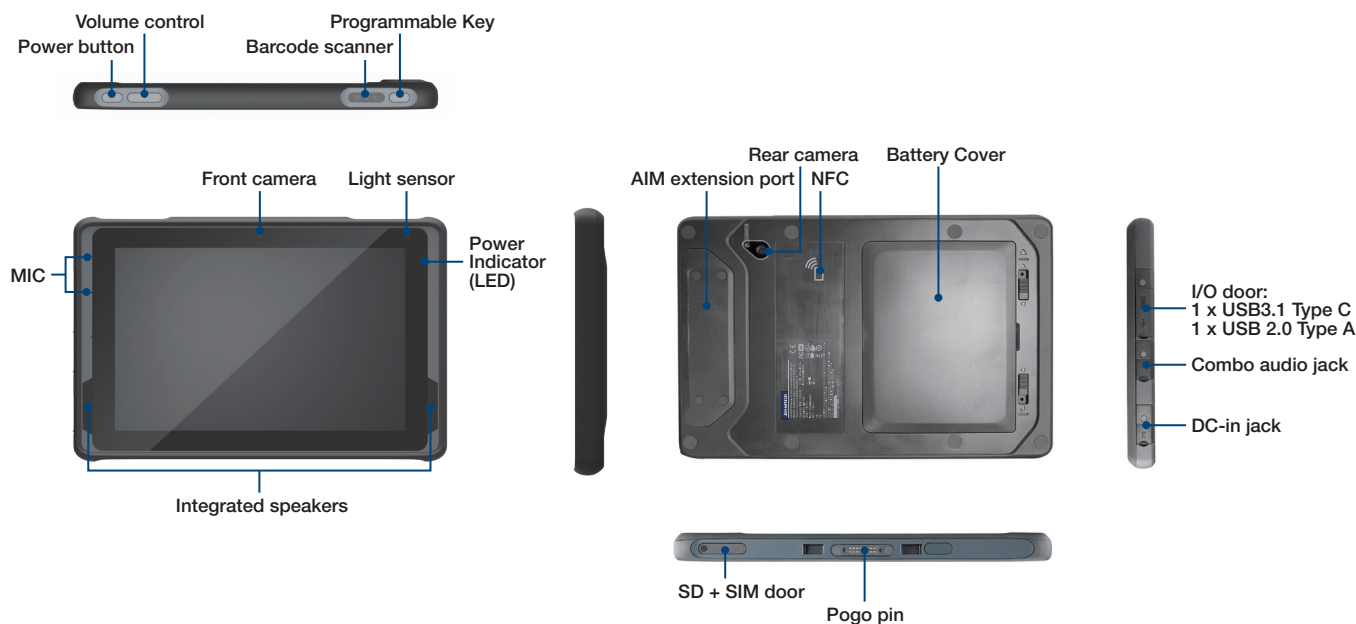
Note: DeviceOn/iService software must be downloaded from the Advantech website at <https://www.advantech.com/search/?q=DeviceOn%2FiService&st=support&sst=Utility>

Dimensions

Unit: mm



System I/O



Ordering Information

Part Number	Memory/Storage	LCD	Front/Rear Camera	Wi-Fi/BT	LTE+GPS	Built In Barcode	NFC	Applicable Regions / Countries	Android Version	Non-GMS
AIM-78S-600S20	4GB/64GB	800nits	✓	✓	✓		✓	Global (except North America)	Android 10	✓
AIM-78S-600B20	4GB/64GB	800nits	✓	✓	✓	✓	✓	Global (except North America)	Android 10	✓
AIM-78S-610S20	4GB/64GB	800nits	✓	✓	✓		✓	North America	Android 10	✓
AIM-78S-610B20	4GB/64GB	800nits	✓	✓	✓	✓	✓	North America	Android 10	✓
AIM-78S-630S20	4GB/64GB	800nits	✓	✓	✓		✓	Global (except North America)	Android 13	✓
AIM-78S-630B20	4GB/64GB	800nits	✓	✓	✓	✓	✓	Global (except North America)	Android 13	✓
AIM-78S-640S20	4GB/64GB	800nits	✓	✓	✓		✓	North America	Android 13	✓
AIM-78S-640B20	4GB/64GB	800nits	✓	✓	✓	✓	✓	North America	Android 13	✓

Optional Accessories

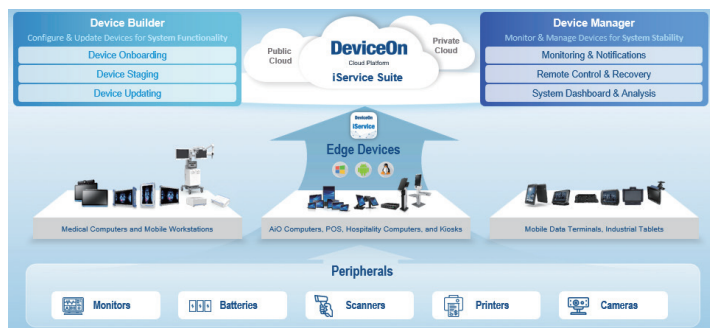
Part Number	Description
AIM-ADPO-0424	ADP A/D 100-240V 65W 19V DC IN
1700001947	Power cord (USA) UL 2P 7A 125 V 183 cm
1700001949	Power Cord(UK) BSI 2P 2.5A 250V 183cm
1700029278-01	Power Cord (Japan) PSE 2P 7A 125V 183cm
1700029279-01	Power Cord (NZ/AU) SAA 2P 2.5A 250V 183 cm
1700008972	Power cord (China)CCC 2P 2.5A 250 V 183 cm
1700001948-11	Power cord (EU) EU 2P 2.5A 250 V 183 cm
1700021662-01	Power Cord (TW) BSMI 2P 2.5A 125V 183cm

Note: Adapter and power cord are suitable for AIM-78, vesa and office dock.

AIM-78S Packing List

Description
1 x AIM-78S
1 x AC/DC adaptor
1 x 2-pin power cord (TW)

DeviceOn - iService Suite



Introduction

Advantech's DeviceOn - iService Suite is an advanced remote device management solution that enables you to centrally manage your devices, minimizing the need for expensive on-site visits and saving your valuable time and resources. Device Builder ensures that your devices are always up-to-date with the latest configuration and software updates, reducing the risk of data breaches and other security threats. Meanwhile, Device Manager helps to ensure that your devices are functioning correctly, reducing downtime and enhancing productivity.

Key Functions

Device Builder



Device Onboarding

- Support Windows, Linux, Android devices
- Quick enrollment process



Device Staging

- OS configuration
- Software/peripheral watchlist
- Device label, alarm rules



Device Updating

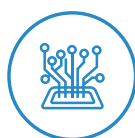
- Cloud software storage
- Installation package for multiple software updating

Device Manager



Monitoring & Notifications

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



Remote Control & Recovery

- Reboot & power controls
- Audio & backlight settings
- Screenshots & remote desktop



System Dashboard

- Devices working status
- Software version sync status
- Results of scheduled tasks

Services & Specifications

Functions List	OS Platform			Service Type	
	Windows	Android	Linux (Ubuntu)	Builder	Manager
	10, 11	8, 10, 12	TBD		
Device Onboarding - Enrollment, Locations and Labels	✓	✓		✓	✓
Profile - OS Settings (Kiosk Mode, ON/Off Schedule, others are OS dependent)	✓ (LTSC)	✓		✓	✓
Profile - Alarm Rules, Software Monitoring, Peripheral Monitoring	✓	✓			✓
OTA Update - Installation Packs, Software Cloud Storage	✓	✓		✓	✓
Monitoring - Device Hardware (CPU/RAM/Storage/Battery)	✓	✓			✓
Monitoring - Advanced Battery Management	✓ (Dependant on device model)				✓
Monitoring - Device Software (Running Status/CPU & Memory Usage)	✓	✓			✓
Monitoring - Peripherals & Display (Connect Status)	✓				✓
Control - Audio volume & Backlight	✓	✓			✓
Control - Screenshot, Reboot, Shutdown	✓	✓			✓
Control - Schedule Tasks	✓	✓			✓
Control - Remote Desktop	VNC				✓

Ordering Information

Ordering P/N	Cloud Type	Description
36CSDOISSASP01	SaaS subscription	DeviceOn - iService Suite device annual fee (365 days)
36CSDOISPSRP01	On-premise server	DeviceOn - iService Suite device license (perpetual)
36CSDOISPSRP02	On-premise server	Software and installation fee for new server deployment
36CSDOISPSRP03	On-premise server	Annual maintenance fee after warranty

AIM-78S Vehicle Docking Station



Features

- Compatible with 9 ~ 32 V_{DC} in-vehicle power supply
- Easy and instant single-handed docking and undocking
- Anti-theft locking mechanism
- External GPS antenna
- Programmable function keys
- High-density connectors
- Compliant with SAE J1455 for vibration and shock tolerance
- Safe and reliable design for vehicle applications

CE FCC CCC

Specifications

		Fully Configured Unit	Charging Dock Only
I/O	High-Density Connector	1 x CAN bus (supports raw CAN, J1939, OBD-II/ISO 15765) with configurable firmware	
		5 x Digital inputs	
		1 x Odometer (supports dry and wet contact) with configurable and switchable firmware (default wet contact)	
		2 x Digital outputs (supports speed pulse)	N/A
		1 x RS-232 (4 wire)	
		1 x RS-232/485 (2 wire) (default RS-485, termination enabled)	
		1 x USB 2.0	
		1 x Power input 12 V 1 A	
GPS	GPS Extended	1 x External GPS antenna	N/A
Function Keys		5 x Programmable function keys	N/A
Key Lock		Anti-theft key lock (key can be removed)	Anti-theft key lock (key can be removed)
Power	Input Voltage	Supports 12/24 V vehicle power (9 ~ 32 V _{DC} input range)	
Mechanical	Dimensions (W x D x H)	226 x 83.08 x 250.24 mm (8.9 x 3.27 x 9.9 in)	
	Weight	0.77 kg (1.70 lb)	
Environment	Operating Temperature	-10 ~ 50 °C (14 ~ 122 °F); 0 ~ 40 °C (32 ~ 104 °F) for charging	
	Storage Temperature	-30 ~ 80 °C (-22 ~ 176 °F)	
	IP Rating	IP54	
	Vibration/Shock	SAE J1455	
	Safety	UL, CB, LVD, CCC	
	Vehicle Power Regulation	E-Mark, ISO7637-2	
Certifications		CE, FCC, CCC	

Ordering Information

Part Number	Description
AIM-VED0-0422	AIM vehicle docking station (full configuration)
AIM-VED0-0423	AIM vehicle docking station (charging only)
1700026766-01	High-density cable
PWS-770-GPSAN00E	External GPS antenna
1700027666-01	Vehicle power cable (In-house engineer testing only)
1700027665-01	Vehicle power cable (vehicle battery)
RAM-MOUNT-07E	AMPS mount w/VESA base, 1.5" ball

Packing List

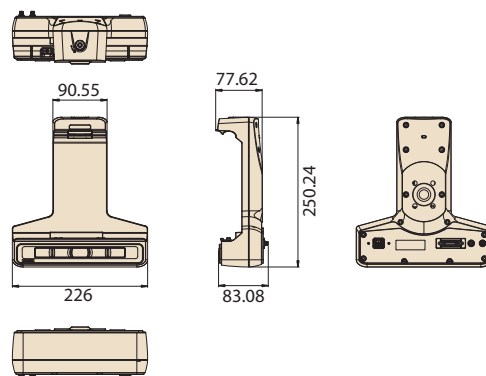
Item	AIM-VED0-0422	AIM-VED0-0423
1	1 x Vehicle Dock(Fully I/O)	1 x Vehicle Dock (Charging Only)
2	1 x Vehicle power cable (vehicle battery)	1 x Vehicle power cable (vehicle battery)

Optional Accessory

Part Number	Description
RAM-MOUNT-07E	AMPS mount w/VESA base, 1.5" ball

Dimensions

Unit: mm



AIM-78S VESA Docking Station



Features

- 9 ~ 32 V wide input voltage range
- VESA (75 x 75 mm)-compliant docking stations
- -10 ~ 50 °C (14 ~122 °F) operating temperature
- Reliable docking connector for office applications

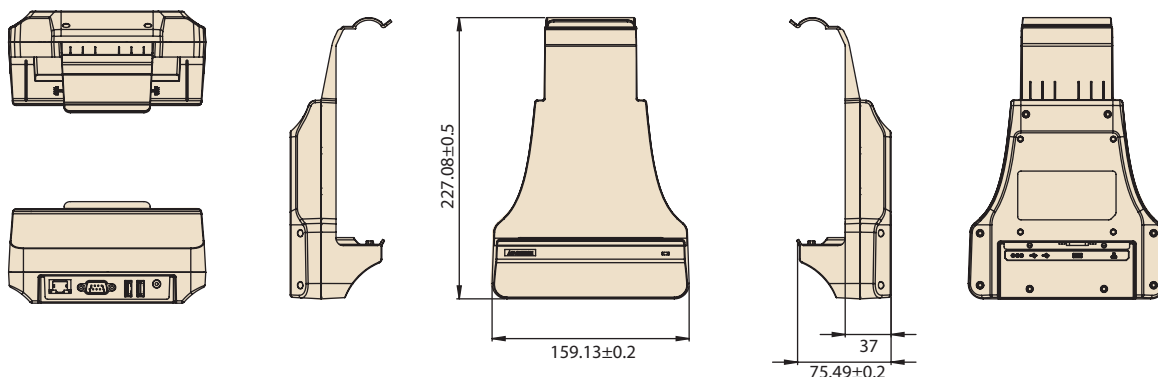
CE FCC

Specifications

		Advanced VESA Docking Station	VESA Docking Station with USB
I/O		2 x USB 3.0	
		1 x RS-232 COM	2 x USB 2.0
Stand		1 x Gigabit LAN	1 x Power jack
		1 x Power jack	
Power	Input Voltage	N/A	N/A
Mechanical	Dimensions (W x D x H)	159.13 x 75.49 x 227 mm (6.3 x 2.9 x 8.9 in)	159.13 x 75.49 x 227 mm (6.3 x 2.9 x 8.9 in)
	Weight	0.33 kg (0.72 lb)	0.32 kg (0.71 lb)
Environment	Operating Temperature	-10 ~ 50 °C (14 ~122 °F); 0 ~ 40 °C (32 ~104 °F) for charging	-10 ~ 50 °C (14 ~122 °F); 0 ~ 40 °C (32 ~104 °F) for charging
	Storage Temperature	-20 ~ 70 °C (-4 ~ 158 °F)	-20 ~ 70 °C (-4 ~ 158 °F)
	Safety	UL, CB, LVD, CCC	UL, CB, LVD, CCC
	Certifications	CE, FCC, CCC	CE, FCC, CCC

Dimensions

Unit: mm



Ordering Information

Part Number	Description
AIM-VSD0-0470	AIM 10 advanced VESA docking station
AIM-VSD0-0471	AIM 10 VESA docking station with USB

Packing List

Item	AIM-VSD0-0470	AIM-VSD0-0471
1	1 x VESA Dock(Advanced I/O)	1 x Vehicle Dock (Charging & USB Only)

Note: The packing list doesn't include adapter and power cord. Please order based on following PNs.

Optional Accessories

Part Number	Description
AIM-ADP0-0424	ADP A/D 100-240V 65W 19V DC IN
1700001947	Power cord (USA) UL 2P 7A 125 V 183 cm
1700001949	Power Cord(UK) BSI 2P 2.5A 250V 183cm
1700029278-01	Power Cord (Japan) PSE 2P 7A 125V 183cm
1700029279-01	Power Cord (NZ/AU) SAA 2P 2.5A 250V 183 cm
1700008972	Power cord (China)CCC 2P 2.5A 250 V 183 cm
1700001948-11	Power cord (EU) EU 2P 2.5A 250 V 183 cm
1700021662-01	Power Cord (TW) BSMI 2P 2.5A 125V 183cm

AIM-78S Desk Docking Station



Features

- -10 ~ 50 °C (14 ~ 122 °F) operating temperature
- Reliable docking connector for office applications

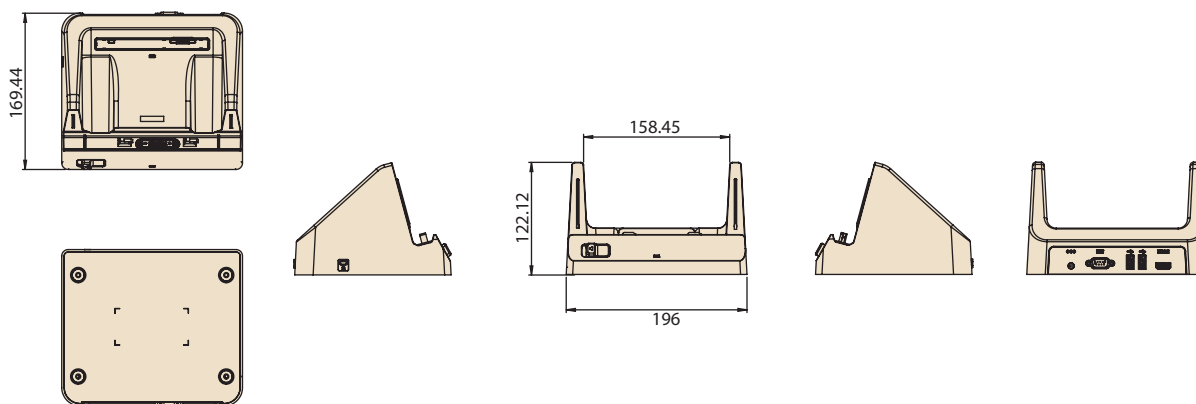
CE FCC CCC

Specifications

		Advanced Desk Docking Station	Desk Docking Station with USB
I/O		2 x USB 2.0	
		1 x RS-232 COM	
		1 x Power jack	2 x USB 2.0
		1 x HDMI	1 x Power jack
		1 x Battery charging bay	
Power	Input Voltage	19 V	19 V
Mechanical	Dimensions (W x D x H)	196 x 169.44 x 122.12 mm (7.72 x 6.67 x 4.81 in)	196 x 169.44 x 122.12 mm (7.72 x 6.67 x 4.81 in)
	Weight	0.76 kg (1.68 lb)	0.75 kg (1.65 lb)
Environment	Operating Temperature	-10 ~ 50 °C (14 ~ 122 °F); 0 ~ 40 °C (32 ~ 104 °F) for charging	-10 ~ 50 °C (14 ~ 122 °F); 0 ~ 40 °C (32 ~ 104 °F) for charging
	Storage Temperature	-20 ~ 70 °C (-4 ~ 158 °F)	-20 ~ 70 °C (-4 ~ 158 °F)
	Safety	CE, FCC, CCC	UL, CB, LVD, CCC
	Certifications	UL, CB, LVD, CCC	CE, FCC, CCC

Dimensions

Unit: mm



Ordering Information

Part Number	Description
AIM-OFD0-0480	AIM 10 advanced desk dock station
AIM-OFD0-0481	AIM 10 desk dock station with USB

Packing List

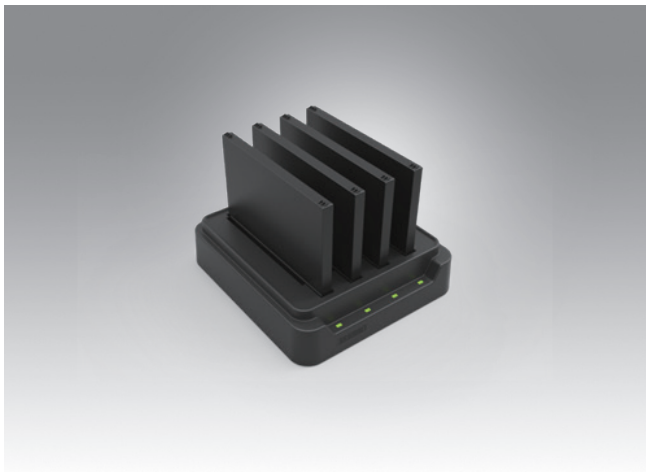
Item	AIM-OFD0-0480	AIM-OFD0-0481
1	1 x Office Dock(Advanced I/O)	1 x Office Dock (Charging & USB Only)

Note: The packing list doesn't Include adapter and power cord. Please order based on following PNs.

Optional Accessories

Part Number	Description
AIM-ADP0-0424	ADP A/D 100-240V 65W 19V DC IN
1700001947	Power cord (USA) UL 2P 7A 125 V 183 cm
1700001949	Power Cord(UK) BSI 2P 2.5A 250V 183cm
1700029278-01	Power Cord (Japan) PSE 2P 7A 125V 183cm
1700029279-01	Power Cord (NZ/AU) SAA 2P 2.5A 250V 183 cm
1700008972	Power cord (China)CCC 2P 2.5A 250 V 183 cm
1700001948-11	Power cord (EU) EU 2P 2.5A 250 V 183 cm
1700021662-01	Power Cord (TW) BSMI 2P 2.5A 125V 183cm

AIM Multi-Battery Charging Station



Features

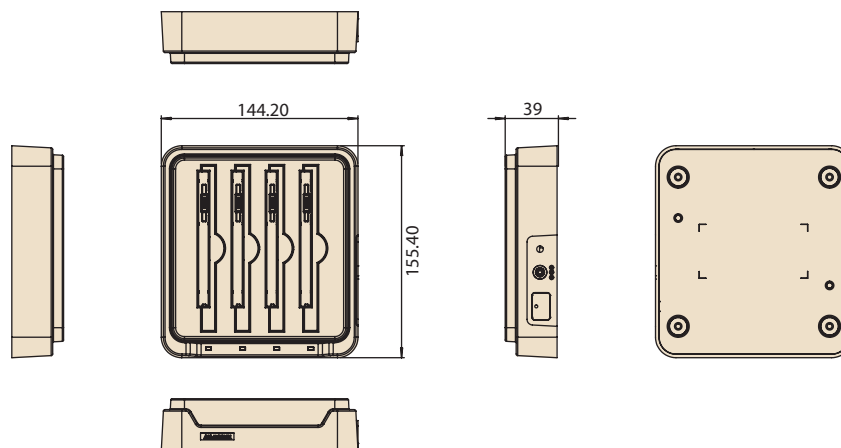
- Supports charging of up to 4 batteries simultaneously
- Overcurrent and overvoltage protection provided
- LED indicators for monitoring charging status



Specifications

Multi-Battery Charging Station for AIM		
Capacity	Number of Bays	4
	Charging Current	1 A
Power	Charging Voltage	12.6 V
	Input Voltage	19 V
LED Indicators		Green: Full
		Amber: Charging
		Red: Error
Mechanical	Dimensions (W x D x H)	144 x 155 x 39 mm (5.7 x 6.1 x 1.5 in)
	Weight	0.48 kg (1.05 lb)
Environment	Operating Temperature	0 ~ 40 °C (32 ~ 104 °F)
	Storage Temperature	-10 ~ 50 °C (14 ~ 122 °F)
	Safety	UL, CB, LVD, CCC, RCM
	Certifications	CE, FCC, CCC, RCM, BSMI

Dimensions



Unit: mm

Ordering Information

Part Number	Description
AIM-MBC0-0051	Multi-battery charging station for AIM

Packing List

Item	AIM-MBC0-0051
1	1 x Multi Battery Charger
2	1 x AC/DC adaptor

Note: The packing list doesn't include power cord. Please order based on following PNs.

Optional Accessories

Part Number	Description
96PSA-A65W19V1-3	ADP A/D 100-240V 65W 19V C6 DC PLUG 180° 62368
1700001524	Power cord (USA) UL 3P 10A 125V 183 cm
1700008921	Power cord (Japan) PSE 3P 7A 125V 183 cm
1700019146	Power cord (China) CCC 3P 10A 250V 183 cm
1700018553	Power cord (NZ/AU) SAA 3P 10A 250V 183 cm
170203180A	Power cord (UK) BSI 3P 10A 250V 183 cm
170203183C	Power cord (EU) 3P 2.5A 250V 183 cm

AIM-78S Extensions and Accessories

Extension Modules

Barcode Scanner (20°)



Barcode Scanner (70°)



MSR + barcode scanner module



LAN + COM module



Part Number	AIM-EXT0-0040	AIM-EXT0-0041	AIM-P521A0	AIM-EXT0-0046
Features	- Sensor: 640 x 480 CMOS sensor - Illumination & Aiming: White LED illuminator/Red LED dot aimer - Frame rate: 30 fps - Field of view: Horizontal: 37.8°; Vertical: 28.8°	- Sensor: 640 x 480 CMOS sensor - Illumination & Aiming: White LED illuminator/Red LED dot aimer - Frame rate: 30 fps - Field of view: Horizontal: 37.8°; Vertical: 28.8°	MSR - Swipe Speed: 3-75 inch/sec - Support Format: ISO7811/ JIS II - Bi-Direction Swipe Barcode Scanner - Sensor: 640 x 480 CMOS sensor - Illumination & Aiming: White LED illuminator/Red LED dot aimer - Frame rate: 30 fps - Field of view: Horizontal: 37.8°; Vertical: 28.8°	1 x 10/100 Ethernet port 1 x COM port
Dimensions	130.2 x 38.7 x 27.8 mm (5.12 x 1.52 x 1.09 in)	130.2 x 38.7 x 32 mm (5.12 x 1.52 x 1.25 in)	130.2 x 68.84 x 80 mm (5.12 x 2.71 x 3.15 in)	130.2 x 70 x 29 mm (5.12 x 2.75 x 1.14 in)
Weight	0.042 kg (0.092 lb)	0.042 kg (0.092 lb)	100g (0.22lb)	0.078 kg (0.171 lb)

UHF RFID Reader



UHF RFID Reader



UHF RFID Reader (Flat type)



Part Number	AIM-EXT0-0047	AIM-EXT0-0049	AIM-EXT0-0050
Features	- RFID output power: 25 watt - RFID antenna type: Linear polarization - Frequency: EU: 867 ~ 869MHz; US: 913 ~ 917 MHz - Tag standard supported: EPC Class 2 Gen. 2/ ISO 18000-6C	- RFID output power: 25 watt - RFID antenna type: Linear polarization - Frequency: EU: 867 ~ 869MHz; US: 913 ~ 917 MHz - Tag standard supported: EPC Class 2 Gen. 2/ ISO 18000-6C	- RFID output power: 25 watt - RFID antenna type: Linear polarization - Frequency: 867 ~ 869MHz; Tag standard supported: EPC Class 2 Gen. 2/ ISO 18000-6C
Dimensions	130.20 x 63.80 x 79.40 mm (5.12 x 2.5 x 3.13 in)	130.20 x 63.80 x 79.40 mm (5.12 x 2.5 x 3.13 in)	130.2 x 110.75 x 82.51mm (5.12 x 4.35 x 3.25 in)
Weight	0.08 kg (0.176 lb)	0.08 kg (0.176 lb)	160g (0.352lb)

AIM-78S Extensions and Accessories

Accessories



Part Number	AIM-SRP0-0000	AIM-SRP0-0001	AIM-SRP0-0002	AIM-SRP0-0004
Features	Black With one stylus holder	Black With one stylus holder	Black With one stylus holder	Black 360° rotatable
Dimensions	240 x 20 mm (9.44 x 0.78 in)	380 x 135 x 20 mm (14.96 x 5.31 x 0.78 in)	1820 x 20 mm (71.65 x 0.78 in)	160 x 160 mm (6.3 x 6.3 in)
Weight	0.022 kg (0.048 lb)	0.05 kg (0.11 lb)	0.05 kg (0.11 lb)	158g (0.35lb)

Battery with Meter



Active stylus



AG+AR Screen Protective Film



Part Number	AIM-BAT0-0452	AIM-P705	AIM-EXT0-0480
Features	Black	Silver	Hardness: 2~3H Reflection Rate: 0.15% Haze: 15% AG/AR Film For sunlight readable
Dimensions	120 x 87 x 7.5 mm (4.72 x 3.43 x 0.30 in)	140 x 9.7 mm (5.51 x 0.38 in)	249 x 165 X 0.150 mm (9.80 x 6.50 x 0.006 in)
Weight	0.147 kg (0.324 lb)	0.02 kg (0.044 lb)	0.014 kg (0.03 lb)