AIM-55

8" Medical-Grade Tablet with Intel® Atom™ Processor and PCAP Touchscreen

Features

- Equipped with DeviceOn/iService software for remote device management
- Intel® Atom™ processor with support for both Windows and Android OS
- 8" full HD projected capacitive touchscreen with scratch-resistant Corning® Gorilla® Glass
- Supports active stylus pen, gloved operation, and palm detection for increased usability
- IP65-rated protection from water and dust ingress
- 4-ft drop tolerance
- AIM extension 14-pin pogo connector supports 1D/2D barcode scanner (20°/70°) and LAN COM extension modules
- AIM dock 16-pin pogo connector supports optional peripherals (VESA dock and stand, multi-tablet charging station, and multi-battery charging station)

DeviceOn/iService Windows Embedded Gold Partner Intel partner

Introduction

AIM-55 is an 8" medical-grade tablet that features a full HD screen with projected capacitive touch control, IP65-rated ingress protection, and Windows/Android operating system. Aimed at healthcare applications, AIM-55 can be equipped with optional extension modules and peripherals that enable seamless communication and unlimited mobility for diverse usage scenarios. Moreover, the tablet can be integrated with a range of optional docking cradles and stands for flexible operation in various healthcare environments.

Moreover, AIM-55 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.
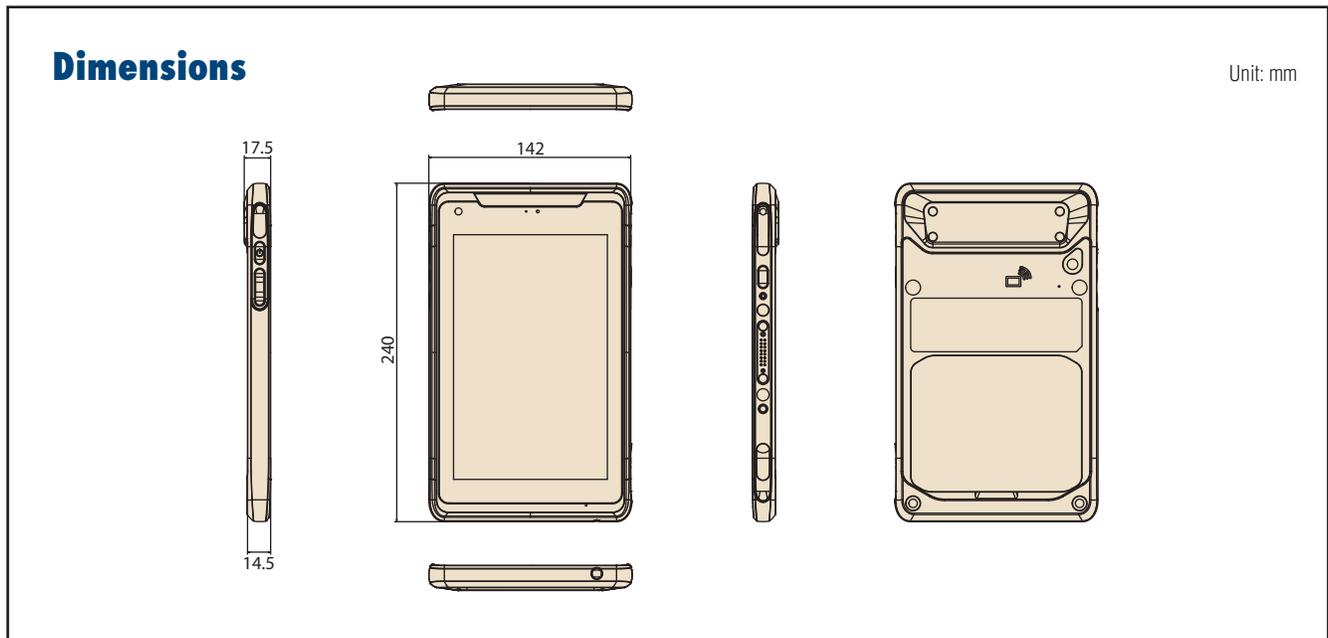
Specifications

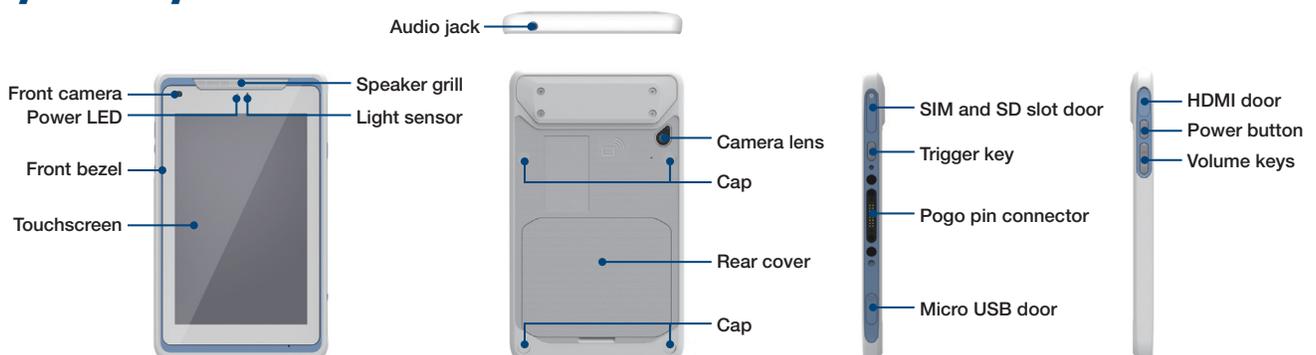|		
System	Processor	Intel® Atom™ x5-Z8350 quad-core, 1.6 GHz (1.44 GHz)
	Memory	4 GB LPDDR3
	OS	Windows 10 IoT Enterprise, Android 6.0
Storage	eMMC	64 GB
	Micro-SD	Up to 256 GB
Display	Type	8" IPS LCD
	Resolution	WUXGA 1920 x 1200
	Brightness	400 cd/m²
	Touch Type	10-point, multi-touch projected capacitive
	Glass Type	Corning® Gorilla® Glass 3
Communication	WLAN	IEEE 802.11 b/g/n
	Bluetooth	Bluetooth® v4.0 Class 2
	NFC	13.56 MHz, compatible with ISO15693, ISO14443A, ISO 14443B, FeliCa
Connectivity	Standard I/O	1 x micro HDMI, 1 x micro USB 2.0 (host and charger), 1 x combo audio jack, 1 x SIM card slot, 1 x micro SD slot
	Extended I/O	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 dock 16-pin pogo connector: 1 x USB 3.0, 9V power
Audio	Speaker	2 x Internal speakers (1W)
	Audio Jack	1 x Audio combo jack (combines stereo audio output and mono microphone input)
Camera	Front	2.0-megapixel fixed-focus camera
	Rear	5.0-megapixel aufo-focus camera with LED flash
Sensors		Ambient light sensor, e-compass, g-sensor, gyroscope
Control Buttons		1 x Power button, 2 x volume keys (up/down), 1 x programmable function key
Battery Capacity Indicators		Green: full (100%); blue: charging; red: low (≤10%)
Power	Input Voltage	Micro USB: 5V/3A Dock pogo: 9V/2A
	Battery	4900 mAh (minimum), 18.6 WHr; swappable Operating time: Up to 6 hours (dependent on usage scenario) Charging time: 3 hours
Environment	Operating Temperature	0 ~ 30 °C/32 ~ 86 °F
	Storage Temperature	-20 ~ 60 °C/-4 ~ 140 °F
	IP Rating	IP65
	Shock	Operating: SAE J1455 compliant; non-operating: IEC 60721-3-5 5M3 compliant
	Vibration	SAE J1455
	Humidity	Operating: 10 ~ 90% @ 30 °C non-condensing Storage: -10 ~ 95% non-condensing
	Drop Tested	Up to 120 cm/4 ft onto plywood over concrete
Physical Characteristics	Dimensions (W x D x H)	240 x 142 x 14.5 mm/9.44 x 5.59 x 0.57 in
	Weight	600 g/1.32 lb
	Color	White/blue
Certifications		CE/FCC Class B, UL60601-1, EN60601-1, EN1789, TELEC, VCCI, BSMI, NCC, CCC, SRRC

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Specifications (Cont.)

		Windows 10	Android 6
	Operating System	Windows 10	Android 6
	Common Controls (Reboot, Shutdown)	✓	✓
	Remote desktop	✓ (VNC)	
	Device-Specific Controls	Audio	Audio, Backlight
	Connection Status	✓	✓
DeviceOn/iService Remote Device Management	Hardware Status	✓*	✓*
	Hard Disk Status	✓*	
	Batch Operation Support	✓	✓
	OTA Storage Management	FTP	Local blob
	OTA Software Updates	✓	✓
	Software Watchlist	✓	✓
	Software Start/Stop	✓*	✓
	Kiosk Mode		✓
*Dependant on device model	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

17.5

142

240

14.5

System Layout

Audio jack

Front camera
Power LED
Front bezel
Touchscreen

Speaker grill
Light sensor

Camera lens
Cap
Rear cover
Cap

SIM and SD slot door
Trigger key
Pogo pin connector
Micro USB door

HDMI door
Power button
Volume keys

Ordering Information

Medical-Grade Tablets

Part Number	Description
AIM-55AT-12301001	Intel® Atom™ x5-Z8350 1.44 GHz CPU, 4GB memory, 64GB storage, Wi-Fi module, Win 10 IoT (64 bit)
AIM-55AT-13301001	Intel® Atom™ x5-Z8350 1.44 GHz CPU, 4GB memory, 64GB storage, Wi-Fi module, Android 6.0

Peripherals

Part Number	Description
AIM-BCRS-0020	Barcode scanner 20° (Honeywell n3680 scan engine)
AIM-BCRS-0070	Barcode scanner 70° (Honeywell n3680 scan engine)
AIM-LANC-0001	LAN COM (1 x RJ45, 1 x COM)
AIM-SRP0-0000	Hand strap
AIM-SRP0-0001	Shoulder strap (portrait)
AIM-SRP0-0002	Shoulder strap (landscape)
AIM-VSD0-0001	AIM-55 VESA dock with full I/O
AIM-VSD0-0003	AIM-55 VESA dock with USB and charger only
HIT-STD-W001-C	VESA dock stand
AIM-P704	EETi active stylus
AIM-MTCS-0001	Multi-tablet charging station
AIM-MBCS-0001	Multi-battery charging station

Optional Accessories

Part Number	Description
Y5AAIM5500	AIM-55 power cable, white, (US), (Phihong)
XAIM-A19WMUSB-M	Adaptor MM18M-59A-R for medical devices (Phihong)
1700001524	Power cable, UL, 3P, 10A, 125V, 183 cm (US)
1700008921	Power cable, PSE, 3P, 7A, 125V, 183 cm (Japan)
1700019146	Power cable, CCC, 3P, 10A, 125V, 183 cm (China)
1700018553	Power cable, SAA, 3P, 2.5A, 250V, 183 cm (Australia/NZ)
170203180A	Power cable, BSI, 3P, 2.5A, 250V, 183 cm (UK)
170203183C	Power cable, CE, 3P, 10A, 250V, 183 cm (EU)

Note: The above power cables are suitable for AIM-55, AIM-VSD, and AIM-MCS.

Packing List

Description
1 x AIM-55
1 x Lithium-ion battery (3.8V/4900mAh)
1 x AC adaptor
1 x Power cable (TW/US)

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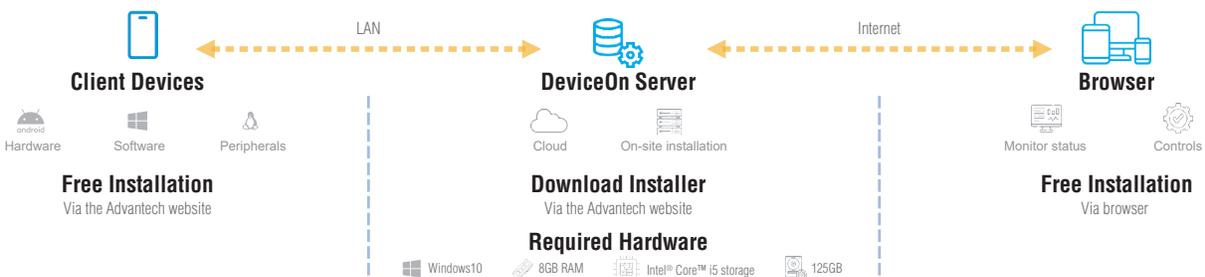- 1-to-many batch reboot, etc.
- Time-saving tasks

Setup Booster
- Software/peripheral watchlist
- Roles, rule templates

Note: Some functions may vary according to the product

System Architecture

Client Devices — LAN — **DeviceOn Server** — Internet — **Browser**

Client Devices:
- Hardware
- Software
- Peripherals

Free Installation
Via the Advantech website

DeviceOn Server:
- Cloud
- On-site installation

Download Installer
Via the Advantech website

Browser:
- Monitor status
- Controls

Free Installation
Via browser

Required Hardware
Windows10 | 8GB RAM | Intel® Core™ i5 storage | 125GB

AIM-55 Office/VESA Docking Station

Features

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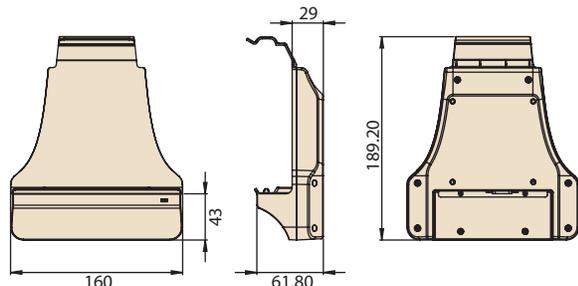- Reliable docking connector for office applications

CE FCC

Specifications

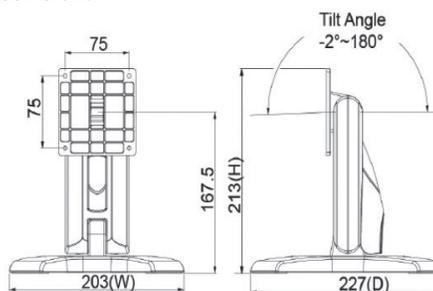|		Advanced VESA Docking Station	Basic VESA Docking Station
I/O		2 x USB 3.0 1 x RS-232 COM 1 x Gigabit LAN 1 x Power jack	2 x USB 2.0 1 x Power jack
Stand		-	-
Power	Input Voltage	9 ~ 32 V	19 V
Mechanical	Dimensions (W x D x H)	160 x 61.8 x 189.2 mm/6.3 x 2.4 x 7.4 in	160 x 61.8 x 189.2 mm/6.3 x 2.4 x 7.4 in
	Weight	0.282 kg/0.62 lb	0.28 kg/0.61 lb
Environment	Operating Temperature	-10 ~ 50 °C/14 ~ 122 °F	-10 ~ 50 °C/14 ~ 122 °F
	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

Advanced/Basic VESA Docking Station

VESA Dock Stand

Ordering Information

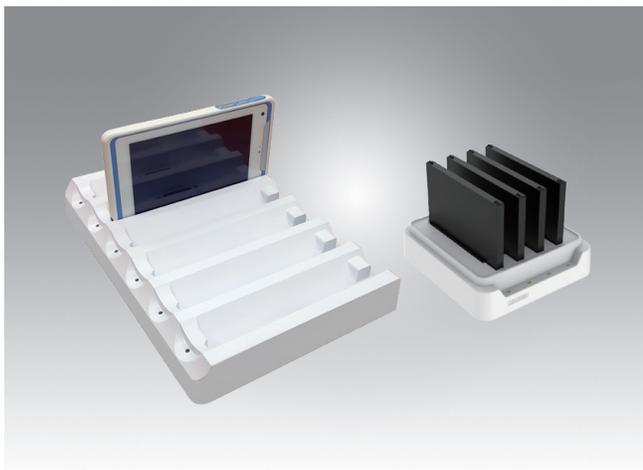| Part Number	Description
AIM-VSD0-0001	AIM 8 advanced VESA docking station (full I/O)
AIM-VSD0-0003	AIM 8 basic VESA docking station (USB and charger only)
HIT-STD-W001-C	AIM 8 VESA stand

Packing List

Item	AIM-VSD0-0001	AIM-VSD0-0003
1	1 x VESA dock with full I/O	1 x VESA dock (USB and charger only)
2	1 x AC/DC adaptor	1 x AC/DC adaptor

Note: The above products do not include a power cable. Customers must order them separately for the specific country of use.

Optional Accessories

Part Number	Description
96PSA-A65W19V1-3	Adaptor A/D 100 ~ 240V, 65W, 19V, C6 DC plug 180° 62368
1700001524	Power cable, UL, 3P, 10A, 125V, 180 cm (US)
1700008921	Power cable, PSE, 3P, 7A, 125V, 183 cm (Japan)
1700019146	Power cable, CCC, 3P, 10A, 125V, 183 cm (China)
1700018553	Power cable, SAA, 3P, 2.5A, 250V, 183 cm (Australia/NZ)
170203180A	Power cable, BSI, 3P, 2.5A, 250V, 183 cm (UK)
170203183C	Power cable, CE, 3P, 10A, 250V, 183 cm (EU)

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AIM-55 Multi-Bay Charging Station

Features

- Supports charging of up to 6 tablets/4 batteries simultaneously
- Overcurrent and overvoltage protection provided
- Rapid single-handed docking and undocking
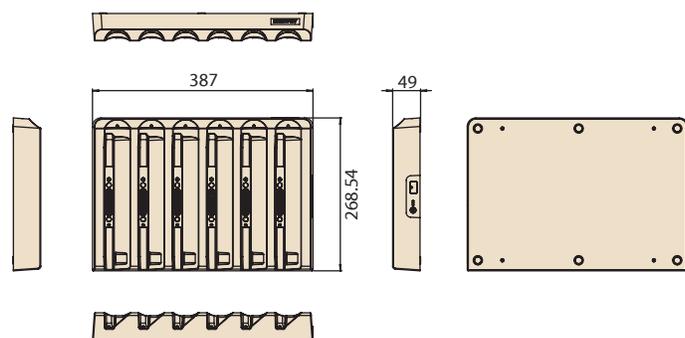- LED indicators for monitoring charging status

Specifications

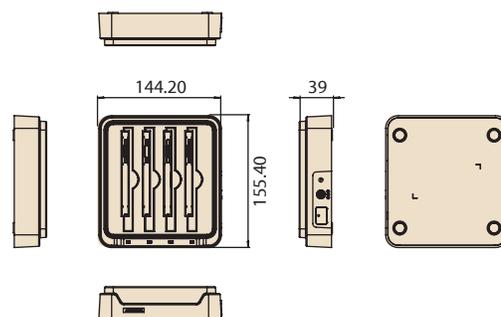|		Multi-Tablet Charging Station	Multi-Battery Charging Station
Capacity	Number of Bays	6	4
Power	Charging Current	2A	2.5A
	Charging Voltage	9 V	4.35 V
	Input Voltage	19 V	19 V
LED Indicators		Green: full Amber: charging Red: error	Green: full Amber: charging Red: error
Mechanical	Dimensions (W x D x H)	387 x 269 x 49 mm/15.23 x 10.59 x 1.92 in	144 x 155 x 39 mm/5.66 x 6.10 x 1.53 in
	Weight	1.98 kg/4.36 lb	0.48 kg/1.05 lb
Environment	Operating Temperature	0 ~ 40 °C/32 ~ 104 °F	0 ~ 40 °C/32 ~ 104 °F
	Storage Temperature	-10 ~ 50 °C/14 ~ 122 °F	-10 ~ 50 °C/14 ~ 122 °F
	Safety	UL, CB, LVD, CCC, RCM	UL, CB, LVD, CCC, RCM
	Certifications	CE, FCC, CCC, RCM, BSMI	CE, FCC, CCC, RCM, BSMI

Dimensions

Unit: mm

Multi-Tablet Charging Station

Multi-Battery Charging Station

Ordering Information

Part Number	Description
AIM-MTCS-0001	Multi-tablet charging station for AIM
AIM-MBCS-0001	Multi-battery charging station for AIM

Optional Adapter

Model	Part Number	Description
AIM-MTCS-0001	96PSA-A120W19V1	Adaptor A/D 100 ~ 240V, 120W, 19V, C6 DC jack
AIM-MBCS-0001	96PSA-A65W19V1-3	Adaptor A/D 100 ~ 240V, 65W, 19V, C6 DC plug 180° 62368

Packing List

Item	AIM-MTCS-0001	AIM-MBCS-0001
1	1 x Multi-tablet charging station	1 x Multi-battery charging station
2	1 x AC/DC adaptor	1 x AC/DC adaptor

Note: The above products do not include a power cable. Customers must order them separately for the specific country of use.

Optional Power Cord

Part Number	Description
1700001524	Power cable, UL, 3P, 10A, 125V, 180 cm (US)
1700008921	Power cable, PSE, 3P, 7A, 125V, 183 cm (Japan)
1700019146	Power cable, CCC, 3P, 10A, 125V, 183 cm (China)
1700018553	Power cable, SAA, 3P, 2.5A, 250V, 183 cm (Australia/NZ)
170203180A	Power cable, BSI, 3P, 2.5A, 250V, 183 cm (UK)
170203183C	Power cable, CE, 3P, 10A, 250V, 183 cm (EU)

AIM-55 Peripherals and Accessories

Extension Modules

	Barcode scanner (20°)	Barcode scanner (70°)	LAN + COM module
Part Number	AIM-BCRS-0020	AIM-BCRS-0070	AIM-LANC-0001
Features	▪ Sensor: 640 x 480 CMOS sensor ▪ Illumination/Aimer: white LED illumination/ red LED dot aimer ▪ Frame rate: 30 fps ▪ Field of view: horizontal: 37.8°; vertical: 28.8°	▪ Sensor: 640 x 480 CMOS sensor ▪ Illumination/Aimer: white LED illumination/ 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 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	0.078 kg/0.171 lb

Accessories

Stylus holder

	Hand strap	Shoulder strap (portrait)	Shoulder strap (landscape)	Battery with meter
Part Number	AIM-SRP0-0000	AIM-SRP0-0001	AIM-SRP0-0002	AIM-BAT0-0252
Features	1 x Black strap 1 x Stylus holder	1 x Black strap 1 x Stylus holder	1 x Black strap 1 x Stylus holder	1 x Black battery with meter
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	120 x 87 x 7.5 mm/ 4.72 x 3.43 x 0.30 in
Weight	0.022 kg/0.048 lb	0.05 kg/0.11 lb	0.05 kg/0.11 lb	0.147 kg/0.324 lb

Active stylus

Part Number	AIM-P704
Features	1 x Black stylus pen
Dimensions	140 x 9.7 mm/5.51 x 0.38 in
Weight	0.02 kg/0.044 lb