Why Choose Advantech?

- Industrial grade products at competitive cost
- Strict revision control and design reliability
- Global logistics and RMA services with local support
- Product longevity up to 3-5 years and superior warranty/service options
- Customized embedded OS and BIOS services
- Partnership with multiple software companies

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- Partnership with multiple software companies

Regional Service & Customization Centers

Greater China

China
Beijing 800-810-0345
Shanghai 86-10-6298-4346
Shenzhen 86-755-8540-0188
Hong Kong 852-2720-5118

Taiwan
Taipei 0800-777-111
Taichung 866-2-2218-4567
Tatung 866-2-2178-6290
Kachung 866-7-229-3600
HsinChu 866-3-518-0320

Worldwide Offices

Asia Pacific

China
Beijing 800-810-0345
Shanghai 86-10-6298-4346
Shenzhen 86-755-8540-0188
Hong Kong 852-2720-5118

Taiwan
Taipei 0800-777-111
Taichung 866-2-2218-4567
Tatung 866-2-2178-6290
Kachung 866-7-229-3600
HsinChu 866-3-518-0320

Japan
- Tokyo 0800-500-1055
- Osaka 81-3-6802-1021
- Osaka 81-6-6257-1887

Korea
- Seoul 080-365-9494
- Seoul 82-2-3653-9494

Singapore
- Singapore 65-6414-1000

Malaysia
- Kuala Lumpur 03-3724-3555
- Penang 04-937-3788

India
- Bangalore 1800-425-5570

Australia
- Melbourne 1300-328-531
- Sydney 61-1-9077-0100

Thailand
- Bangkok 66-2-248-3140

Europe

Europe
- Germany 0800-2426-8080
- France 33-1-4119-4666

- Italy 39-02-9544-961

- Belgium & Northern
- France 31-76-0333-100
- Netherlands 31-165-550-505
- UK 44-1491-681144

- Spain 94-21-5747-0
- Germany 04121-9732-500

- Brazil 0800-770-5355

Americas

North America
- Cincinnati 1-888-576-9668
- Milan 1-513-742-8895
- Irvine 1-408-519-1788
- Taipei 1-949-786-7178

- Brazil 0800-770-5355

- Indonesia 62-21-7900525

- Thailand 62-21-7900525

www.advantech.com

Please verify specifications before quoting. This guide is intended for reference purposes only.

All product specifications are subject to change without notice.

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Advantech Industrial Portable Computers

Founded in 1983, Advantech is a global leading ePlatform services provider of web-based technology, computing platforms and customization services, empowering innovations in the connected eWorld. Advantech cooperates closely with solution partners to help provide complete solutions for a wide array of applications in diverse industries. Advantech delivers more than a thousand products and solutions in three business categories: Embedded ePlatform Organization, eService & Applied Computing, and Industrial Automation. With nearly 5,000 talented people, Advantech operates an extensive support, sales and marketing network in 18 countries and 39 major cities to deliver fast time-to-market services to our worldwide customers.

In 2010, Advantech acquired ACA Digital Corporation, a Taiwan-based company founded in 2005, and formed the Industrial Portable Computer team, which specializes in industrial ruggedized portable products as well as design, manufacturing, and integration services. Advantech never stops innovating and always brings portability, security, power and versatility to you!

Global Service Support

Advantech has over 15 regional toll-free hotlines and offices throughout 39 cities in 18 countries, with nearly 5,000 employees to provide efficient, professional services for customer care, product selection, technical support, and order handling. Through our call centers and online stores, customers worldwide can now enjoy the convenience of Advantech’s multi-service channels to reduce business turnaround time. Together with four customer service centers in Taiwan, China, the Netherlands, and the United States, our global service network offers an extensive spectrum of services that includes warehousing, logistics, peripheral certification, sourcing & purchasing, and RMA & support services.
Industrial Portable Computers offer a line-up of industrial ruggedized portable products as well as design, manufacturing, and integration services. The product line includes ruggedized tablet PCs, handheld terminals, and industrial PDAs, designed to deliver outstanding performance in harsh environments such as warehouses or depots, which are subject to dirt, dust, dropping and rough handling. Best of all they are portable and lightweight in design, and functionality can be extended by way of peripheral attachments.

**Comprehensive Product Portfolio for Mobile Users**

**Industrial Tablet PC**
- C10L: 10.4" Semi-Rugged Tablet PC with AMD Geode LX800 Processor
- S10A: 10.4" Semi-Rugged Tablet PC with Intel® Atom™ Z530XL Processor
- X10D: 10.4" Rugged Tablet PC with Intel® Core™2 Duo U7500 Processor
- X10E: 10.4" Rugged Tablet PC with VIA Eden Processor

**Industrial PDA**
- P37B: 3.7" Ultra Rugged PDA with Marvell PXA 270 Processor
- H35M: 3.5" Rugged Handheld with Marvell PXA 310 Processor
- H35B: 3.5" Rugged Handheld with Marvell PXA 270 Processor

**Handheld Terminal**
- H35M: 3.5" Rugged Handheld with Marvell PXA 310 Processor
- H35B: 3.5" Rugged Handheld with Marvell PXA 270 Processor

**Design Capability**
- **Seamless Communication**: Bluetooth and Wi-Fi are built in; optional GPS and 3.5G fulfill all communication needs.
- **Sunlight Readable Solution**: Optional Sunlight Readable solution makes the device easy to operate, indoors and out.
- **Drop Resistance**: Products survived a 3 to 5 ft drop to concrete. Durable devices minimize downtime and total cost of ownership.
- **Military Standards**: All Rugged Products carry MIL-STD-461E/ MIL-STD-810F military certifications to give users peace of mind.
- **Water and Dust Resistance**: Products are IP54/55/67 rated for water and dust resistance, and are able to operate in harsh environments.

**Standard peripheral options**, including RFID, barcode readers, and magnetic stripe readers, offer customization choices to fill unique and niche market needs.

**Integrated Peripherals**
- **Military Standards**: All Rugged Products carry MIL-STD-461E/ MIL-STD-810F military certifications to give users peace of mind.
- **Lightweight Design**: Lightweight design and a full range of quick-attach accessories including handle, magnetic stripe reader and docking, enhance mobility.

**Wide Working Temperatures**: All rugged products can operate from -20° C to 60° C.

**Water and Dust Resistance**: Products are IP54/55/67 rated for water and dust resistance, and are able to operate in harsh environments.
Advantech’s Semi-Rugged Tablet series is designed to meet all business requirements; products are portable, lightweight, designed with medium ruggedization, and functionality can be extended by way of peripheral attachments. Their flexibility and mobility make them the most reliable and efficient partners in your business.

**Easy-on Modularized Peripherals**
- Extend flexibility via various optional peripherals, such as GPS / GPRS / Barcode Scanner / MSR / RFID
- Special easy-on design

**Rich Array of I/O Ports**
- Supports a variety of applications.
- All ports with IP54 sealed, locking connectors

**Designed for Long Haul Operation**
- One built-in battery, one external battery, and one battery charging on the dock, max supported—three.
- Three hot swappable, high-capacity Li-ion batteries provide 8 hours of operation

**Lightweight**
- Only 1.2 kg, high mobility in every domain

**Built-in WLAN and Bluetooth**
**IP53 compliant**
**Hot swap, high capacity Li-ion battery provides 6 hours of operation**

**Hand strap and carry bag with short strap**

**Application Areas**

**Warehouse**

**Aviation**

**Hospitality**

**Retail**

**Semi-Rugged Tablet**

**Introduction**

**Design Concept**

**C10L**
- 10.4” Semi-Rugged Tablet PC with AMD Geode LX800 Processor
- Built-in WLAN and Bluetooth
- Built-in stand
- IP54 certified

**S10A**
- 10.4” Semi-Rugged Tablet PC with Intel® Atom™ Z530XL Processor
- Efficient Intel® Atom™ Z530 1.6 GHz processor
- 10.4” XGA LED panel, WAV transflective-LCD, high brightness 300 cd/m²
- Rich array of I/O ports support a variety of applications
- IP54-certified, 3 ft drop rating from 90 cm, MIL-STD-810F
- Optional GPS / GPRS / barcode scanner / MSR / RFID
- Five function keys
- Hot swap, high capacity Li-ion battery provides 6 hours of operation
- Hand strap and carry bag with short strap
- Lightweight, 1.2 kg

**Advantages**

- Efficient design and hot swap battery enhance personnel mobility.
- Optional Wi-Fi and MSR card reader enable speedy payment and order fulfillment.
Advantech’s Rugged Tablet PC family is built with durability and stability in mind; these products survive in the toughest of environments. Rugged designs can resist dust, water, vibration, and falls. All rugged series products make ideal platforms to capture, process, and transfer data according to specific vertical market requirements, such as manufacturing, warehousing, military, aviation, factory maintenance, field services, transportation, police, fire, and other emergency services.

### Introduction

Rich Array of I/O Ports
- Supports a variety of applications.
- All ports with IP65 sealed locking connectors.

Sunlight Readable Solution
- Sunlight readable solution enables viewability in all lighting conditions.
- High luminance: 800 cd/m² on XGA solution

Operates Flawlessly in Demanding Environments
- Rugged design resists water, dust, vibration, shock, and falls.
- With an abundant choice of accessories, products can fit all kinds of vehicles and environments.

Waterproof Smart Fan
- Mechanical structure encloses waterproof fan, heat sink and bottom case delivers better performance (for X10D only).

### Application Areas

#### Emergency

Data Terminal
- X10 series and its complete range of accessories are customized for disaster rescuers, emergency medical personnel, and firefighters, as well as policemen who need to stay in patrol cars for a long time. Collect and deliver critical information directly to first-responders with our multiple wireless communications options. The X10 Series special vehicle dock can be installed on various types of vehicles to access information.

### Design Concept

#### Operating Flawlessly in Demanding Environments

- Rugged design resists water, dust, vibration, shock, and falls.
- With an abundant choice of accessories, products can fit all kinds of vehicles and environments.

#### Sunlight Readable Solution

- Sunlight readable solution enables viewability in all lighting conditions.
- High luminance: 800 cd/m² on XGA solution

### X10 Series Rugged

- 10.4" XGA high resolution TFT LCD panel
- Sunlight readable and high luminance solution for outdoor applications
- Rich array of I/O ports for a variety of applications
- Durable design with shock-resistant magnesium alloy housing
- Compliant with MIL-STD-810F and MIL-STD-461E standards
- IP65 rated
- Three foot drop test, shock proof

#### Logistics

Fleet Management
- Truck drivers and warehouse personnel need a durable Tablet PC that can connect to remote databases in real time. During the handling and transportation of goods, X10 series runs multiple wireless radios to help capture and communicate mission critical data and report delivery status and quantities of goods in real time. In addition, it passes vibration and shock tests, plus the sunlight readable solution makes it a perfect partner for logistic workers.

#### Maintenance

Communication Terminal
- X10 Series devices are ideal for maintenance workers who need to work long hours outside their offices. Compared with ordinary hand-helds, the 10.4" display of the X10 series better presents structure diagrams and many other facility details. X10 series supports Bluetooth, WLAN, WWAN, and GPS; users can access central databanks any time and anywhere.

#### X10 Series

- **X10D**
  - 10.4" Rugged Tablet PC with Intel® Core™2 Duo U7500 Processor
  - Efficient Intel® Core™2 Duo processor
  - Built-in Wi-Fi/Bluetooth/GPS/WWAN

- **X10E**
  - 10.4" Rugged Tablet PC with VIA Eden Processor
  - Low power consumption processor
  - Built-in Wi-Fi/Bluetooth/GPS

#### X10 Series Applications

- **X10 Series**
  - Data Terminal
  - Fleet Management
  - Emergency
  - Communication Terminal
  - Logistics
  - Maintenance

### X10 Series Products

- **X10 Series**
  - X10D
  - X10E
  - X10 Series Rugged

### X10 Series Accessories

- **X10 Series**
  - Sunlight readable solution
  - High luminance: 800 cd/m² on XGA solution
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### X10 Series Specifications

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### X10 Series Benefits

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### X10 Series Applications

- **X10 Series Applications**
  - Data Terminal
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### X10 Series Accessories

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  - IP65 rated
  - Three foot drop test, shock proof
Handheld Terminal

Introduction

Advantech’s Rugged Handheld Terminal series is a trusted platform for harsh environments. With HSDPA (3.5G), 802.11b/g, Bluetooth, RFID/HF/LF/UHF, barcode and GPS, the H35 series provides fully-functional communication devices for any outdoor RFID applications. Standard military grade certified, and with IP rating guaranteeing protection against dirt, dust, water and falls, Advantech’s handheld devices are strong and rugged for reliable mobile communications in every field.

Design Concept

Data Capture Ability
- Supports 1D/2D Linear Imager
- 5 Mega Pixel camera

Fully-functional for any Outdoor RFID Applications
- Supports HF or UHF RFID

High Portability and Mobility
- Enable all wireless connections, Bluetooth2.0, HSDPA (3.5G), GPS, Wi-Fi.

Application Areas

Logistics

Outdoor Logistics Management
Understanding the demand of logistics workers for dispatch accuracy and responsiveness, Advantech provides seamless communication and rugged devices. Numeric keypads make for easy data entry. Optional HSDPA (3.5G) and GPS enable fleet management and route accounting. In addition, IP65, 5 ft drop resistance, and high readability fulfill outdoor usage needs.

Retail

Inventory Management
During the receiving and selling of goods, H35 series runs multiple wireless radios helping to capture and communicate mission critical data to make sure the inventory and ordering information is in real time. The powerful data capture ability enables the retailer to read 1D and 2D barcodes, HF and UHF RFID tags. The IP65-certified H35 series is the most reliable in retail management.

Museum

Guide System
The long distance RFID reading technology makes it easy for tourists to guide themselves in a museum. In addition, rugged design extends the device usage time and saves on cost for the operators.

Government

Parking Lot Management
Advantech Handheld Terminals can be equipped with imaging capability to give officers the ability to scan a barcode on permits, meters and vehicle registrations. The image capture feature allows for vehicle images to be uploaded and stored on central servers for future reference. H35M also equipped with a SAM Card Module ensures information security.

3.5” Rugged Handheld with Marvell PXA 310 Processor
- Marvell PXA310 806 MHz
- 3.5” QVGA TFT LCD
- IP65 rating guarantees total protection against dirt, dust and water
- Certified MIL-STD-810F
- Standard 28 keys including, 4 side keys and numeric keys
- Field navigation application with HSDPA (3.5G), 802.11bg, Bluetooth, RFID/HF/LF/UHF, barcode and GPS
- Supports Windows® CE6.0
- Handheld, vehicle mounting solution for mobile applications

3.5” Rugged Handheld with Marvell PXA 270 Processor
- Marvell PXA 270 624 MHz core
- 3.5” QVGA TFT LCD transflective technology
- IP65 rating guarantees total protection against dirt, dust and water
- Certified MIL-STD-810F
- Standard 28 keys including navigation keys, 4 function keys and numeric keys
- High capacity Li-ion battery provides 6 hours of continuous operation
- Outdoor navigation application with HSDPA (3.5G), 802.11bg, Bluetooth, RFID/HF/LF/UHF, barcode and GPS
- Supports Windows® CE6.0
- Handheld, vehicle mounting solution for mobile applications
Advantech’s Industrial PDA is an ultra rugged PDA and fully-functional communication device for any outdoor application. Comes with standard military grade MIL-STD-810F and MIL-STD-461E certification, and is constructed with an IP67 rating guaranteeing total protection against dirt, dust and water. Driven by a high capacity battery, the Industrial PDA handles a 5-foot drop, and operates in an extreme range of operating temperatures, providing mobility in any harsh environment. Advantech’s Industrial PDA is a strong device for reliable mobile communications in any environment.

**Introduction**

**Design Concept**

Rich I/O for P37B

- Supports a variety of applications

<table>
<thead>
<tr>
<th>USB type A/USB1.1 host</th>
<th>DC IN &amp; MINI USB type B (USB1.1 slave)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RS232</td>
<td>R-J45 Port &amp; SW reset Button</td>
</tr>
<tr>
<td>Headphone, Microphone</td>
<td></td>
</tr>
<tr>
<td>Micro SD Slot</td>
<td></td>
</tr>
<tr>
<td>Battery Light</td>
<td>GPRS Light</td>
</tr>
</tbody>
</table>

**Successful Application**

**Battle Management in the US Military**

Ultra-Rugged PDA P37B with IP67 Connector

Military and defense personnel work in some of the most dangerous and demanding environments in the world, facing everything from rain and snow to the harsh realities of modern weaponry. Delivering high degrees of durability and mobility are key factors for military and defense equipment.

MIL-STD-461E and 810F certified P37B survives in harsh environments. In terms of mobility, P37B communicates via wireless technology that links frontline personnel, local station, and central information center. All critical information, including situational awareness, command and control, and mission planning, can be transmitted real-time.

**Application Areas**

**Military**

Battle Management

The IP67 certified P37B is designed for data collection in extremely difficult environmental conditions. It operates well in the dust and the intense heat of a desert, in the humidity and moisture aboard ship, or in the shock and vibration of a tank.

**Measurement**

Measurement Device

Rich I/O of the P37B enables connection to other sensors for specific measurement usage. The IP67 certified P37B is both waterproof and shock-resistant. The built-in GPS function can connect to both European and American GPS systems. No matter where you are, the P37B captures and transmits accurate information.

**Utility**

Operations and Communications Device

The IP67 certified P37B is operable at high or low temperatures and is waterproof and shock-resistant, ensuring that personnel can work effectively wherever they are. With its sunlight readable display, work progress continues indoors or out.

**Successful Application**

**3.7” Ultra Rugged PDA with Marvell PXA 270 Processor**

- Marvell PXA 270 624 MHz core
- 3.7” VGA TFT transflective technology
- IP67 rating guarantees total protection against dirt, dust and water
- Certified by MIL-STD-810F and MIL-STD-461E
- Standard 5-way controller and 4 function keys for one-hand operation
- High capacity Li-ion battery provides 6 hours of continuous operation
- Outdoor navigation application with HSDPA (3.5G), 802 11b/g, Bluetooth and GPS
- Handheld, vehicle mounting solution for mobile applications
Selection Guide

<table>
<thead>
<tr>
<th>Item/Model Name</th>
<th>Semi-Rugged Tablet</th>
<th>Rugged Tablet</th>
<th>Handheld Terminal</th>
<th>Industrial PDA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU</strong></td>
<td>Intel® Core™ i5 6th gen</td>
<td>Intel® Core™ i7 6th gen</td>
<td>Intel® Xeon® E3-1270 v5</td>
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<td>8 GB (2 x 4 GB DDR4-2133)</td>
<td>16 GB (2 x 8 GB DDR4-2400)</td>
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<td>32 GB (2 x 16 GB DDR4-2400)</td>
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<td><strong>Storage</strong></td>
<td>256 GB SSD</td>
<td>512 GB SSD</td>
<td>1 TB SSD</td>
<td>1 TB SSD</td>
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<td><strong>Audio System</strong></td>
<td>Realtek ALC262</td>
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<td><strong>Power Adapter</strong></td>
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<td><strong>Display</strong></td>
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<td>14&quot; Full HD @ 1920 x 1080</td>
<td>15.6&quot; FHD @ 1920 x 1080</td>
<td>17.3&quot; FHD @ 1920 x 1080</td>
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<td><strong>Camera</strong></td>
<td>8 MP</td>
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<td>16 MP</td>
<td>20 MP</td>
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<td><strong>Network</strong></td>
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<td><strong>OS</strong></td>
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<td>Windows 10 Pro</td>
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<tr>
<td><strong>Accesories</strong></td>
<td>USB cable, data cable, power cable</td>
<td>USB cable, data cable, power cable</td>
<td>USB cable, data cable, power cable</td>
<td>USB cable, data cable, power cable</td>
</tr>
</tbody>
</table>

(*) Rugged Mobile Computer (G1-7500) | (-65°F to 185°F) | (-65°F to 185°F) | (-65°F to 185°F) | (-65°F to 185°F) |
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