

Aug. 15, 2012, Updated Aug. 21, 2012

Customer FAQs for the Juno T41 Rugged Handheld Computer

What is the Trimble Juno T41?

The Trimble Juno T41 is an ultra-rugged smartphone inspired handheld computer for data collection and mobile field work.

The Trimble Juno T41 is offered in a range of configurations, with key options including a 3.75G smart phone capability, choice of ingress protection rating and choice of operating system.

The Juno T41 brings a 4.3" capacitive touchscreen with multi-touch user interface and a sunlight-readable display. It offers processing power second to none with up to 1 GHz processor and up to 512 MB RAM and 16 GB of on-board Flash storage, a high resolution sunlight-readable screen, and a long-life battery that can run the device all day on a single charge. Featuring your choice of Windows Embedded Handheld (WEHH) or Android "Gingerbread" operating system, and with built-in Wi-Fi with Cisco Compatible eXtensions and Bluetooth wireless technology, the Trimble Juno T41 offers powerful performance and all-in-one feature integration for high productivity no matter what the conditions.



What are the key features of the Trimble Juno T41?

- Trimble Juno T41 is built for superior performance as an all-in-one device, to be used in any environment, including harsh conditions.
- Choice of operating systems: Windows Embedded Handheld 6.5 or Android 2.3.4 "Gingerbread"
- 4.3" WVGA sunlight-readable display protected by Gorilla® Glass
- Multi-touch user interface with capacitive stylus compatibility
- 8 megapixel camera with dual LED flash and geo-tagging
- 3.75G cellular data, text and voice capability
- 1 GHz TI OMAP processor with up to 512 MB RAM and 16 GB on-board Flash storage

This document is for informational purposes only and is not a legally binding agreement or offer. Trimble makes no warranties and assumes no obligations or liabilities hereunder.

Trimble Mobile Computing Solutions Division, 4100 SW Research Way, Corvallis, OR 97333-1066, USA

© 2012, Trimble Navigation Limited. All rights reserved. Trimble, the Globe & Triangle logo and Juno are trademarks of Trimble Navigation Limited, registered in the United States and in other countries. T41 is a trademark of Trimble Navigation Limited. All other trademarks are the property of their respective owners.



- Bluetooth and Wi-Fi b/g/n with Cisco Compatible eXtensions v4
- GPS receiver with 2 - 4 meter accuracy with SBAS corrections
- MCX port for optional External GPS Antenna for increased yield opportunity
- Accelerometer and Electronic Compass

What different configurations are available for the Juno T41?

The Trimble Juno T41 handheld is offered in three models with a variety of options, as illustrated in the chart below. (Note: each model is physically different; you cannot upgrade from one model to another.)

Model	Part Number	Color / IP Rating	O.S.	CPU	RAM/ Flash	Bluetooth	Wi-Fi	GPS	8 MP Camera	Phone / WWAN
M	T41MLN-TGW-00	IP68	WEHH	800 MHz	256 MB / 8 GB			2-4 m		
	T41MLN-TGA-00		ANDROID							
C	T41CLN-TYW-00	IP65	WEHH	800 MHz	256 MB / 8 GB	•	•	2-4 m	•	
	T41CLN-TYA-00		ANDROID							
	T41CLN-TGW-00	IP68	WEHH							
	T41CLN-TGA-00		ANDROID							
X	T41XLN-TYW-00	IP65	WEHH	1.0 GHz	512 MB / 16 GB	•	•	2-4 m	•	•
	T41XLN-TYA-00		ANDROID							
	T41XLN-TGW-00	IP68	WEHH							
	T41XLN-TGA-00		ANDROID							

Can the Juno T41 be used for voice calls?

Yes, if using the model X that features the penta-band 3.75G GSM cellular data, text and voice capability. With this model, the device can be used just like any other smartphone on the market. Penta-band GSM is compatible with 3G cellular networks worldwide.

What operating systems does the Juno T41 support?

The Juno T41 is available in two operating system choices: Windows Embedded Handheld 6.5 and Android 2.3.4 “Gingerbread.” Both operating systems have Software Development Kits with API Documentation.

How does the operating system language provisioning feature work?

When the Juno T41 is turned on for the first time, the operating system prompts the user to select one of ten available languages: English, Simplified Chinese, Japanese, Korean, Spanish, Portuguese (Brazilian), German, French, Italian and Russian. This is a one-time action and cannot be undone.

What level of accuracy can I expect with my Trimble Juno T41?

The device is designed to achieve 2 to 4 meter accuracy with its integrated antenna, with SBAS corrections.

What are SBAS corrections and how does the Trimble Juno T41 use SBAS?

All Juno T41 models have an integrated GPS receiver that supports SBAS (Satellite Based Augmentation Systems) satellites under normal conditions. SBAS is an augmentation technology for GPS, which calculates GPS integrity and correction data with RIMS (Ranging and Integrity Monitoring Stations) on the ground and uses geostationary satellites (GEOs) to broadcast GPS integrity and correction data to GPS users.

There are several compatible SBAS systems available around the world including:

- WAAS (Wide Area Augmentation System) for North America
- MSAS (Multi-Functional Satellite Augmentation System) for Asia
- EGNOS (European Geostationary Navigation Overlay Service)

What GPS input/output protocols are supported by the Trimble Juno T41?

Protocol	Type
NMEA	Input/output, ASCII, 0183, 2.3 (compatible to 3.0)
UBX	Input/output, binary
RTCM	Input, 2.3

What is RTCM?

RTCM (Radio Technical Commission for Maritime Services) is a unidirectional protocol (input to the receiver) that is used to supply real-time differential correction data (DGPS) to the GPS receiver.

Can I use an external GPS antenna with my Trimble Juno T41?

The Trimble Juno T41 has an MCX port for attaching the optional External GPS Antenna accessory. Using an external antenna typically provides access to more GPS satellites and SBAS signals in areas of cloud or tree cover, urban or natural canyons or when inside a vehicle.

Is raw GPS data available?

Raw data output is supported at an update rate of 5 Hz. The raw data stream can be used in external applications that offer precision positioning, real-time kinematics (RTK) and attitude sensing.

What connectivity options does the Trimble Juno T41 support?

All Trimble Juno T41 models, except the M, have integrated Bluetooth and Wi-Fi wireless technology. The X model is equipped with a 3.75G cellular modem for connecting to the Internet and making phone calls without the need for a separate device.

What can I use the Trimble Juno T41's Wi-Fi capabilities for?

Trimble Juno T41 C and X model handheld computers have an integrated Wi-Fi wireless Local Area Network (WLAN) radio that can be used to receive data anywhere within the range of a Wi-Fi access point. Wi-Fi and 802.11g are sometimes referred to as wireless Ethernet. A Wi-Fi connection can be used to connect to the Internet (at broadband speeds) through an 802.11b, 802.11g or 802.11n access point. With Cisco Certified eXtensions v4, the T41 supports a variety of security options. In order to set Authentication, Encryption Types, EAP Authentication and Inner Authentication, the Summit Wireless Manager must be enabled and configured.

When there is an active connection to a Wi-Fi access point, power consumption increases and the battery will discharge more rapidly, depending on factors such as:

- total data sent and received over time
- ratio of upload and download activity (upload requires more energy)
- distance between the Juno T41 and the access point (greater distance requires more energy)

What can I use the Bluetooth capabilities for?

The Trimble Juno T41 has an integrated Bluetooth radio that you can use to establish cable-free connections to other Bluetooth devices that are within 10 meters.

Using a Bluetooth connection, you can communicate with Bluetooth-enabled devices such as mobile phones, desktop computers and more. You can also communicate with Bluetooth-enabled peripheral devices instead of Serial or USB connections.

When there is an active connection to another Bluetooth device, power consumption increases and the battery will discharge more rapidly. Individual usage patterns will vary by device and the frequency of the Bluetooth communications.

What are the functions of the integrated digital camera?

The Trimble Juno T41 C and X models include an 8 megapixel integrated digital camera with dual LED flash and geo-tagging. The camera is accessed through an application that is pre-installed with the operating system. The camera features a variety of shooting modes to make it easier to capture images in different lighting conditions, and it can also record video with audio.

The 8-megapixel sensor can capture images with low, medium, or high compression, and in various resolutions ranging from 320 x 240 to 2592 x 1944 pixels.

The camera uses Trimble-developed software application with a graphical user interface and other advanced features such as time and date stamping, digital zoom and geo-tagging. Time, date, latitude, longitude and elevation/altitude data can be stored in the EXIF data or stamped onto the image. Also, the time and date data can be sourced from the internal real-time clock or the GPS receiver.

How are the Trimble Juno T41 handhelds powered?

The Trimble Juno T41 is supplied with a built in, rechargeable 3,300 mAh lithium-ion polymer battery that provides up to 12 hours of battery life in normal use (including wireless radios and GPS). The battery is internally rechargeable using the international charging kit that comes with the system. An optional External Battery Pack can provide even longer run time.

What types of cable connections does the Juno T41 support?

The Juno T41 has a robust custom port that supports USB host, USB client or 9-pin Serial data connections. See optional and standard accessories for more information.

What's in the box?

The Trimble Juno T41 is supplied with the following components and accessories:

- International AC Charging Kit with four international plug adapters
- Custom USB Cable for syncing to computer
- Package of two (2) ultra clear screen protectors
- Microfiber cloth for cleaning the touchscreen
- Wrist strap
- SD/SIM Card Access Tool
- Quick Start Guide (with URL for online user manual)

What optional accessories are available for the Trimble Juno T41?

The following optional and replacement accessories are available for the Trimble Juno T41. For more details about these accessories, please visit the Trimble MCS web store at <http://store.trimble.com/rugged>.

ACCAA-114	T41 External Battery Pack "Juice Pack"
ACCAA-218	T41 Port Cover
ACCAA-257	Wrist Strap
ACCAA-309	External GPS Antenna
ACCAA-310	Capacitive Touchscreen Gloves (M/L)
ACCAA-310	Capacitive Touchscreen Gloves (XL)
ACCAA-311	Audio Headset
ACCAA-365	T41 Ultra Clear Screen Protectors Kit (QTY 2)
ACCAA-366	T41 Ultra Clear Screen Protectors Kit (QTY 10)
ACCAA-563	T41 USB Cable
ACCAA-564	T41 USB 9-pin Serial Adapter
ACCAA-565	T41 USB Host Adapter
ACCAA-670	T41 International AC Charging Kit
ACCAA-671	T41 Vehicle Charging Kit
ACCAA-810	T41 Stylus with Tether

Where can I get more information?

Visit www.trimble.com/rugged or contact your local Trimble reseller to learn more about Juno T41 and Nomad, Yuma, Recon or Ranger rugged computers.