DT Research

DT301X-TR Rugged GNSS Tablet

Slim, Lightweight with Integrated High-Accuracy GNSS

The DT Research DT301X-TR Rugged GNSS Tablet features the integration of a large 10.1” capacitive touch screen, an powerful Intel® Core™ i processor, and the positioning receiver within a compact, lightweight yet durable package. With Windows® operating system and network connection, this tablet is compatible with existing GIS software for mapping applications and brings together the advanced workflow for GIS data capture, accurate positioning, and data transmitting. With the RTK GNSS receiver connected to an external antenna, this powerful tablet enables the highest precision positioning. Rated IP65, MIL-STD-810G and MIL-STD-461F, the DT Research DT301X-TR Rugged GNSS Tablet provides real-time survey grade control points for field applications.

Features

- Intel® 8th Generation Core™ i5/i7 processor
- Microsoft® Windows® operating system
- 10.1" sunlight readable capacitive touch screen (800 nits), digital pen support
- High capacity, hot-swappable battery pack
- Built-in survey-grade RTK GNSS Module with optional foldable antenna
- Built-in back camera
- IP65-rated for water and dust resistance
- MIL-STD-810G for shock and vibration protection
- MIL-STD-461F for EMI and EMC tolerance
- Optional Intel® RealSense™ Depth camera, 2D barcode scanner
- Optional long range Bluetooth, GNSS, 4G LTE

Applications

- Agriculture
- Mapping/ GIS
- Surveying/ Mining
- Natural Resources
- Utilities/ Government
- Engineering/ Construction
- Transportation
- Logistics
- Water Management

Specifications

	
Model	**DT301X-TR**
System	
CPU	Intel® Core™ i5-8250U, Quad-Core, 1.6GHz (up to 3.4GHz) Intel® Core™ i7-8550U, Quad-Core, 1.8GHz (up to 4.0GHz)
RAM	8GB to 16GB
Storage	128GB to 1TB Flash
Operating System	Microsoft® Windows® 10 IoT Enterprise
Display	10.1" high-brightness (800 nits) screen with capacitive touch, outdoor viewable
Display Resolution	1920 x 1200
Buttons	1 power button and 3 programmable buttons
Speaker	Built-in speaker
Camera	8 megapixel back camera with auto focus, white balance, gain control, and exposure control
Network Interface	
WLAN	Wi-Fi 802.11ac, 2.4GHz/ 5GHz dual band
Bluetooth	Bluetooth 4.0 LE
I/O Ports	
USB Ports	USB 3.0 x 1 and USB Type-C x 1
Headset Jack	1 (3.5mm)
DC-in	1
Ethernet	Ethernet 10/ 100/ 1000MB Base-T LAN
Mechanical and Environmental	
AC/DC Adapter	**Input:** 100 – 240V AC; **Output:** 19V DC, 3.42A
Battery Pack	Hot swappable battery, 11.4V, 5400mAh; Hot swappable battery, 11.4V, 8000mAh (optional)
Enclosure	ABS + PC plastics and magnesium-aluminum alloy
Dimensions (H x W x D)	7.8 x 11 x 0.86 in/ 198 x 280 x 21.9 mm
Weight	3.1 lbs/ 1.4 kg
Regulatory	FCC Class B, CE, RoHS compliant
Temperature	**Operation*:** -20°C – 60°C (AC mode), -20°C – 45°C (battery mode); **Storage:** -55°C – 70°C
Humidity	0% – 90% non-condensing
Major Options	
Barcode Scanner	2D scanner, reads 1D also
Camera	Intel® RealSense™ Depth back camera, supports distance capture for the 3D scanning, environment sensing and background segmentation applications
Long Range Bluetooth	Class 1 Bluetooth (1000 ft)
Mobile Broadband	4G LTE/AWS

* Specifications subject to change without notice.

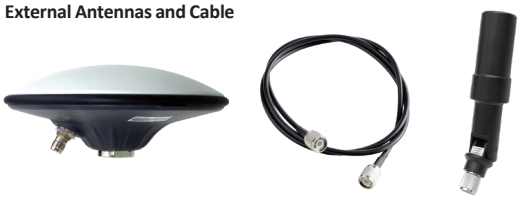
GNSS Module

Multi Frequency GNSS Module			
Receiver Type	GNSS multi-frequency RTK with carrier phase		
Signals Received	GPS, GLONASS, BeiDou, Galileo, QZSS		
Channels	372		
GPS Sensitivity	-142 dBm		
SBAS Tracking	3-channel, parallel tracking		
Update Rate	1 Hz standard, 10 Hz and 20 Hz available optional		
Accuracy	**RMS (67%)**	**Horizontal**	**Vertical**
	RTK	8 mm + 1 ppm	15 mm + 2 ppm
	SBAS (WAAS)	0.3 m	0.6 m
	Autonomous, no SA	1.2 m	2.4 m

Accessories

The DT301X-TR Rugged GNSS Tablets have customized accessories to meet numerous deployment needs.

- **External Antennas and Cable**



- **Battery Charging Kits**

- **High Capacity Battery Pack**

- **Detachable Keyboard**

- **Carrying Case**

- **Digital Pen**

Product Configurator

www.dtresearch.com/productconfig

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