



Global Positioning Receiver for StackableUSB™ USB1700



Features

- ✓ 12-channel, WAAS-capable GPS module
- ✓ Option passive antenna
- ✓ Small 1.85" x 1.78" board



The USB1700 module easily adds GPS capabilities to any StackableUSB Host computer or microcontroller. Powered by the Trimble Copernicus GPS core module, the USB1700 has extremely fast startup times for determining location and tracking movement. It performs well in challenging foliage-canopy, multipath, and urban-canyon environments. This small easy-to-use expansion module comes with sample software and full documentation.

The USB1700 module provides a 12-channel, WAAS-capable GPS function. The

RF antenna option improves performance by providing the GPS module a connection to a passive antenna

The 1.85" x 1.78" module is USB 2.0 compliant providing users the advantages of plug-and-play interfacing. The module stacks onto the top or bottom of any StackableUSB Host single board computer or microcontroller, forming a small, rugged, embeddable system, ideal for harsh environments. The USB1700 can connect to desktop PCs and laptops via a Mini-B USB connector for development.

Software/Driver Support

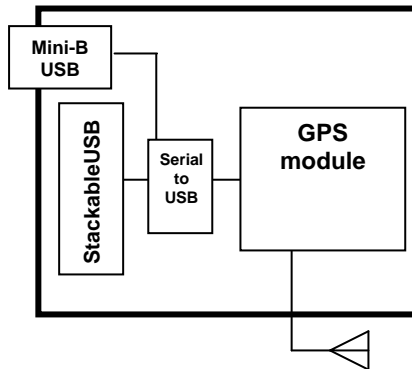
Windows XP
Windows CE
Linux
Microcontroller firmware
Sample programs

Compatible Hardware

StackableUSB Host single board computers or microcontrollers
PC Host desktops and laptops

Mounting/Packaging

1/4-Size 104™ Form Factor
Standoffs, STD0FFUSB



Specifications

Mechanical:

- 1.85" x 1.78"
- ¼-Size 104™ Form Factor

Power Requirements:

- +5v ±5% at 40mA typical, 100mA max

Environmental:

- 40° to +85°C operating
- 40° to +85°C storage
- 5%-95% relative humidity, non-condensing

GPS Module:

- Trimble Copernicus supports NMEA, TSIP, and TAIIP protocols
- Horizontal accuracy: <3m (50%), <8m (90%)
- Altitude accuracy: <10m (50%), <16m (90%)
- Velocity 0.06 m/sec
- Pulse-per-second accuracy: ±50ns

External Connections:

- StackableUSB
- Mini-B USB connector
- MCX non-magnetic RF connector

Internal Electrical Interface:

- StackableUSB
- USB 1.1 & 2.0 compatible, full-speed

Development Kit:

- Base module
- Complete cable set
- Documentation, schematics, sample software

Ordering Information:

OEM Modules:

USB1700-ST	Global Positioning Receiver board with StackableUSB stack-through connector
USB1700-PC	Global Positioning Receiver board with Mini-B USB connector for PC connection
CS1700	Complete cable set
1700OPT1	Antenna Connector

Related Products:

STDOFFUSB	StackableUSB Standoff Kit
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Development Board Kits*

DK1700-ST	Global Positioning Receiver board with StackableUSB stackthrough connector; Windows-ready development kit
DK1700-PC	Global Positioning Receiver board with Mini-B USB connector for PC connection; Windows-ready development kit

*See Development Kit Specifications