Specification

General

Chipset	MTK MT3329
Frequency	L1, 1575.42MHz
C/A Code	1.023 MHz
Channels	66 channels
SBAS	WAAS, EGNOS, GAGAN,MSAS Supported
Datum	WGS84(Default), Tokyo-M, Tokyo-A, User Define

Dimensions

Length/Width/Height	46(L)x33(W)x17.3(H)mm, without cable
Cable Length	2m

Performance Characteristics

Position Accuracy	Without aid: 3m 2D-RMS DGPS(RTM,SBAS(WAAS,EGNOS,MASA)):2.5m 2D-RMS
Velocity Accuracy	Without aid:0.1 m/s DGPS (RTCM, SBAS (WAAS, EGNOS, MSAS)):0.05m/s
Acceleration Accuracy	Without aid:0.1 m/s² DGPS (RTCM, SBAS (WAAS, EGNOS, MSAS)):0.05m/s²
Timing Accuracy	100 ns RMS
Sensitivity[1]	Acquisition:-148dBm (Cold Start) Reacquisition:-160dBm Tracking:-165dBm
Update Rate	10 Hz

Acquisition (Open sky, stationary)	
Reacquisition Time[1]	Less than 1 second
Hot start[1]	1.0s (Typical)
Warm start[1]	34s (Typical)
Cold start[1]	35s (Typical)
Dynamic	
Altitude	Maximum 18,000m
Velocity	Maximum 515m/s
Acceleration	Maximum 4G
Power	
Input Voltage	DC 5.0V ±5%
Power Consumption @ 5.0V	Acquisition:48mA Typical
	Tracking:38mA Typical
I/O	
Signal Output	8 data bits, no parity, 1 stop bit
Baud Rates	9600bps (4800/38400/57600/115200 bps by option)
Protocols	NMEA 0183 v3.01 (Default: GGA,GSA,GSV,RMC,VTG) RTCM MTK NMEA Command
Environment	
Operating Temperature	-40 °C to 85 °C (without coin battery) -20 °C to 60 °C (with coin battery)
Storage Temperature	-50°C to 90 °C (without coin battery) -20°C to 60 °C (with coin battery)
Operating Humidity	5% to 95% (no condensing)

[1] Reference to GPS chipset specification