



I-87211W-G

GPS Receiver Module (serial bus type) (Asia Only)

Features

- Support PACs and Remote I/O expansion units of ICP DAS
- Support 66-channel GPS
- RS-232 supports NEMA v0183 v3.01 format or DCON protocol
- Built-in 2-channel DO, 1-channel PPS (1 pulse/s)
- PPS: 100 ms pulse output/sec for precise timekeeping and time measurement
- Capable of SBAS (WAAS, EGNOS, MSAS)



Introduction

I-87211W module features high sensitivity, low power and ultra small form factor. This GPS module is powered by MediaTek solution, it can provide you with superior sensitivity and performance even in urban canyon and dense foliage environment.

Applications

- Satellite time correction
- Personal positioning and navigation
- Automotive navigation
- Marine navigation

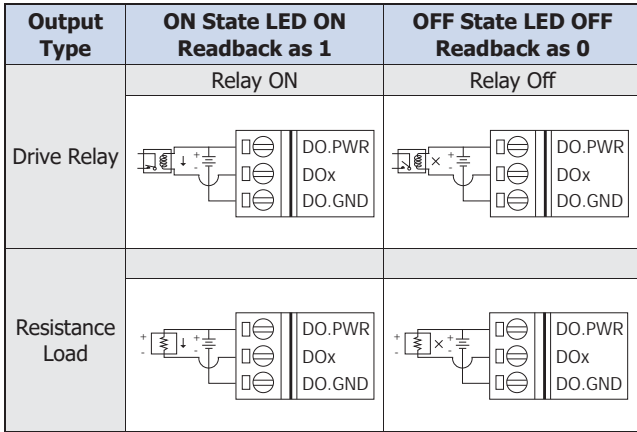
I/O Specifications

Digital Output	
Output Channel	2 (Sink)
Output Type	Non-isolated Open Collector
Output Current	100 mA
Load Voltage	+5 VDC ~ +30 VDC

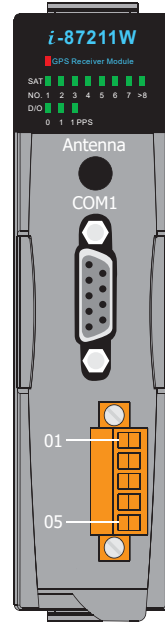
System Specifications

GPS Receiver	
Chip	MediaTek solution
Frequency	L1 1575.42 MHz, C/A code
Support Channel	32
Position Accuracy	Capable of SBAS (WAAS, EGNOS, MSAS)
Max. Altitude	<18,000 m
Max. Velocity	<515 m/s
Startup Time	Cold Start (Open Sky) = 42 s (typical)
Sensitivity	Tracking = Up to -158 dBm
	Cold start = Up to -142 dBm
Protocol Support	NMEA 0183 version 3.01
GPS Output	
1 PPS	Pulse per second output (Default 100 ms pulse/sec)
RS-232 Interface	GPS information output
LED Indicators	
Power/Communication	1 LED
Digital Output	3 LEDs
GPS	8 LEDs
Power	
Power Consumption	0.75 W (Max.)
Mechanical	
Dimensions (W x L x H)	30 mm x 91 mm x 114 mm
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-30 ~ +75°C
Humidity	5 ~ 95% RH, Non-condensing

Wiring



Appearance

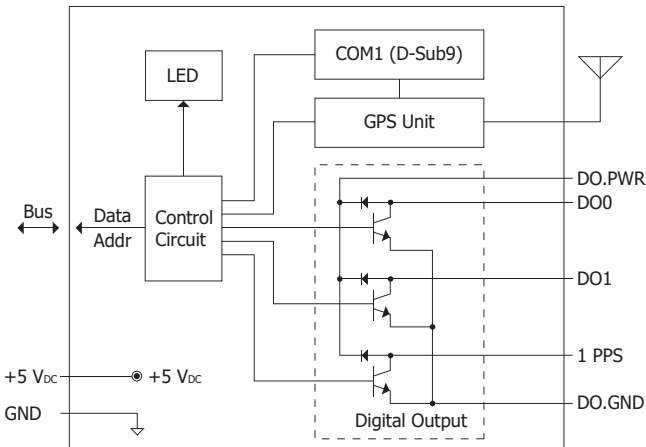


Pin Assignment	Terminal No.	Pin Assignment
-	01	06 -
GPS_TxD	02	07 -
GPS_RxD	03	08 -
-	04	09 -
GND	05	-

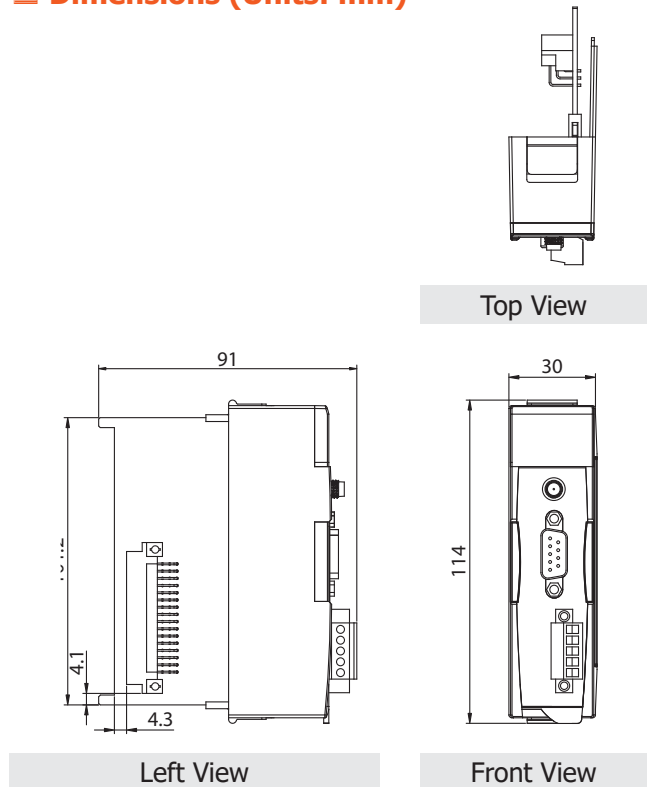
COM1 9-Pin Female D-Sub Connector

Terminal No.	Pin Assignment
01	DO.PWR
02	DO0
03	DO1
04	1 PPS
05	DO.GND

Internal I/O Structure



Dimensions (Units: mm)



Ordering Information

I-87211W-G CR	GPS Receiver Module (serial bus type), includes a 5 m GPS antenna (ANT-115-03) (Gray Cover) (RoHS) (Asia Only)
----------------------	--

Accessories

ANT-115-03 CR	4PI81K0000001	5 m GPS Active External Antenna (SMA Plug) (RoHS)
---------------	---------------	---