

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

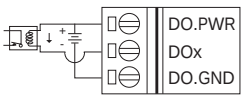
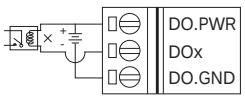
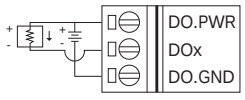
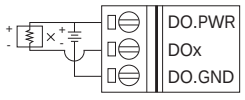
Automotive navigation
Personal positioning and navigation
Marine navigation
Satellite time correction
Precise timekeeping and time measurement

Specifications

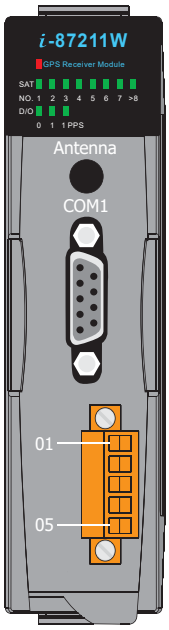
LED Indicators	
Status	1 x Power/Communication 3 x Digital Output 8 x GPS
GPS/GNSS	
Acquisition Time	Cold Start (Open Sky)=42 s (typical)
Chip	MediaTek solution
Frequency	L1 1575.42 MHz, C/A code
Max. Altitude	<18,000 m
Max. Velocity	<515 m/s
Position Accuracy	Capable of SBAS (WAAS, EGNOS, MSAS)
Protocol	NMEA 0183 version 3.01 (Baudrate 9600 bps)
Sensitivity	Tracking: Up to -158 dBm Cold start: Up to -142 dBm
Support Channels	32
Digital Output	
Channels	2 (Sink)
Type	Non-isolated Open Collecto
Load Voltage	+5 VDC ~ +30 VDC
Load Current	100 mA
COM Ports	
Ports	1 x PPS (Pulse per second output (Default 100 ms pulse/sec))
	1 x RS-232 Interface (GPS information output)
Power	
Consumption	0.75 W (Max.)
Mechanical	
Dimensions (mm)	30 x 91 x 114 (W x L x D)
Environment	
Operating Temperature	-25 ~ +75°C
Storage Temperature	-40 ~ +85°C
Humidity	10 ~ 90% RH, Non-condensing

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Wiring

Output Type	ON State LED ON Readback as 1	OFF State LED OFF Readback as 0
	Relay ON	Relay Off
Drive Relay		
Resistance Load		

Appearance

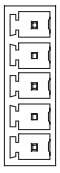


Pin Assignment	Terminal No.		Pin Assignment
-	01		
GPS_TxD	02	06	-
GPS_RxD	03	07	-
-	04	08	-
GND	05	09	-

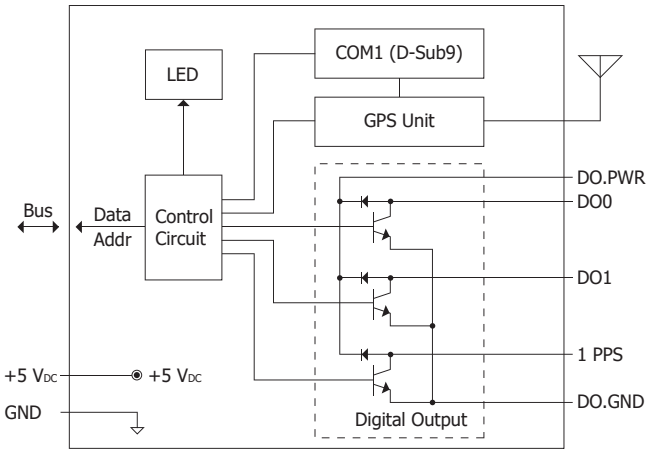


COM1 — 9-Pin Female D-Sub Connector

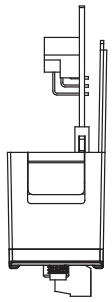
Terminal No.	Pin Assignment
01	DO.PWR
02	DO0
03	DO1
04	1 PPS
05	DO.GND



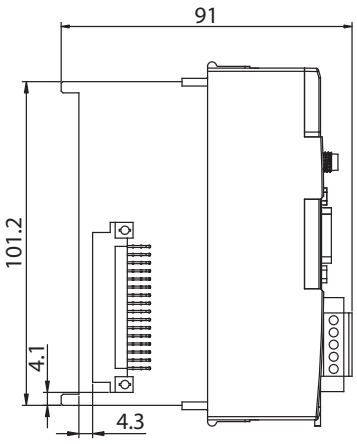
Internal I/O Structure



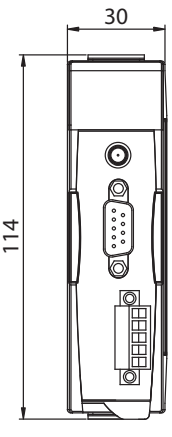
Dimensions (Units: mm)



Top View



Left View



Front View

Ordering Information

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

Accessories

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

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