

G-4514P-4GAU

4G Power Saving PAC with Solar charger and GPS
(Asia Only, Except China)

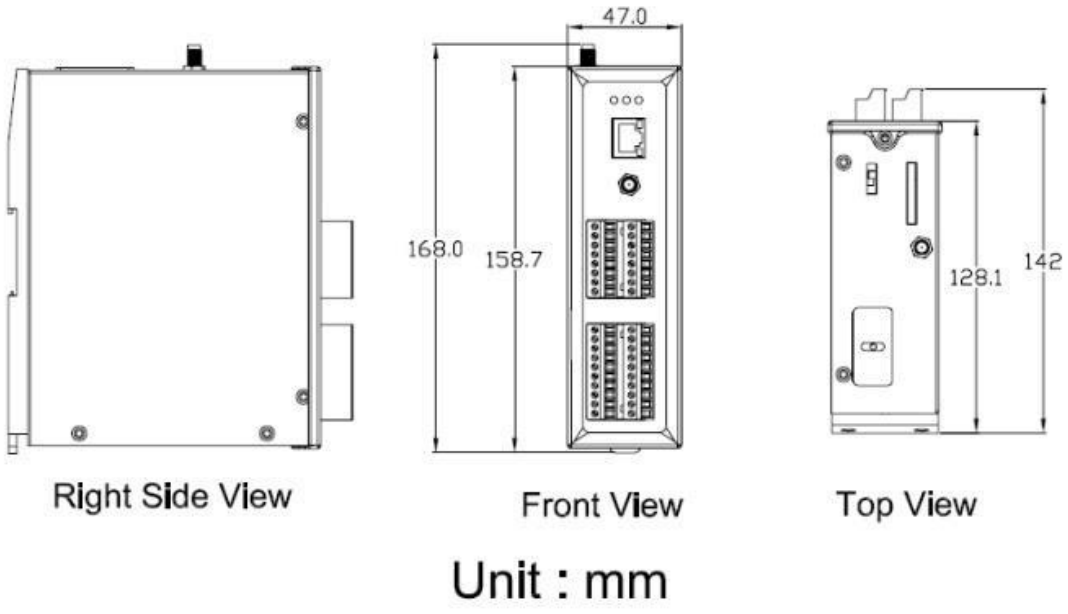
Features

- Embedded MiniOS7, anti-virus
- Support GSM, WCDMA,4G LTE
- Solar charger for Lead acid battery
- 10/100 Base-TX compatible Ethernet controller
- COM port: COM1 (5-wire RS232), COM2 (RS-485)
- Built-in RTC, NVRAM, EEPROM
- 128*64 dots LCM display (option)
- GPS: 32 channels with All-In-View tracking (option)
- High reliability in harsh environments
- DIN-Rail mountable

Introduction

The G-4514 series are M2M (Machine to Machine) Power Saving PAC with a cellular transceiver and a solar charger. It can be used in hydrologic monitoring or mudslide monitoring system. With optional GPS model, the G-4514 can also be a GPS tracking system for vehicle management or maritime system. The features of G-4514-4G series: Solar charger, 4G module, Ethernet interface, optional GPS module, 3 digital inputs, 3 digital outputs, 8 analog inputs, 1 relay output.

Dimensions



I/O

Analog Input	
Channels	8
Type	Current
Range	0 ~ 20 mA
Resolution	12-bit
Accuracy	+/- 2 LSB (+/- 0.0097 mA)
Sampling Rate	1 KHz max. (Read one channel).
Isolation	2500Vrms 3000Dc to DC
Digital Input	
Channels	3
Type	Dry Contact
ON Voltage Level	Close to GND
OFF Voltage Level	Open
Isolation	Non-isolated
Digital Output	
Channels	3
Type	Open Collector
Sink/Source (NPN/PNP)	Sink (NPN)
Load Voltage	+30 VDC max.
Load Current	100 mA max.
Isolation	Non-isolated
Relay Output	
Channels	1
Contact Rating	Form C: 2A @ 30 VDC 0.25 A @ 250 VAC
Mechanical Endurance	typ. 10^8 operations

Specification

CPU Module	
CPU	80 MHz internal microprocessor
EEPROM	16 KB, retention > 40 years. 1,000,000 erase/write cycles
Flash	512 MB
NVRAM	31 bytes, battery backup, data valid up to 10 years
SRAM	512KB
Real Time Clock	Provide seconds, minutes, hours, day of week/month, month, and year
Watchdog Timer	Yes
Lead Acid Battery Charger	
Battery Voltage	12V Lead-Acid Battery
Charging Voltage	Voltage of Power Input must be over +16V
Low Voltage Protect	Low Voltage disconnect = 11.1V / Low Voltage reconnect = 12.6V
LED Indicators	
Status	1 x System
	1 x 3G
	1 x GPS
	1 x Charging / Fault
2G System	
Data Transmission Rate	GPRS Downlink transfer: Max. 85.6 kbps; Uplink transfer: Max. 42.8kbps
Frequency Band	850/900/1800/1900 MHz
Coding Schemes	CS 1, CS 2, CS 3, CS 4
GPRS multi-slot	GPRS class 10/8; GPRS station class B
Power Class	Class 4 (2 W @ 850/900 MHz) Class 1 (1 W @ 1800/1900MHz)
SMS Format	Sending: UCS2/7bits Receiving: UCS2/7bits
3G System	
Data Transmission Rate	DC-HSPA+ Downlink transfer: Max. 42 Mbps; Uplink transfer: Max. 5.76Mbps TD-SCDMA Download: Max. 4.2 Mbps; Upload: Max 2.2Mbps CDMA2000 EVDO Download: Max. 14.7 Mbps; Upload: Max 5.4Mbps

3G System	
Frequency Band	WCDMA 850/900/1900/2100 MHz
Power Class	Class 3 (24dBm+1/-3dB) for WCDMA
SMS Mode	MT, MO, CB, Text and PDU mode
GPS/GNSS	
Acquisition Time	Hot start (Open Sky) = 2 s(typical) Cold start (Open Sky) = 36 s(typical)
Protocol	NMEA 0183 version 3.01
Sensitivity	Tracking = up to -159 dBm (with external LNA) Cold start = up to -146 dBm (with external LNA)
Support Channels	32
4G System	
Data Transmission Rate	LTE Downlink transfer: Max. 100 Mbps; Uplink transfer: Max. 50 Mbps
Frequency Band	FDD LTE: B1/B2/B3/B4/B5/B7/B8/B28 TDD LTE: B40
Ethernet	
Ports	1 x RJ-45, 10/100Base-T(X)
COM Ports	
Ports	1 x RS-232
	1 x RS-485
Power	
Consumption	Deep Sleep: < 10 mA @ 12VDC. Deep Sleep (With LCD): < 11 mA @ 12VDC; Sleep: < 15 mA@12VDC. Idle: 90 mA @ 24 VDC; Data Link: 150 ~ 400 mA (peak) @ 24 VDC
Mechanical	
Casing	Metal
Dimensions (mm)	47 x 142 x 168 (W x L x H)
Installation	DIN-Rall and Wall mount
Environment	
Operating Temperature	-20 ~ +70 °C
Storage Temperature	-40 ~ +80 °C
Humidity	5~90% RH, non-condensing

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Application



- **Car Monitor/Tracking System**



Ordering Information

G-4514P-4GAU	4G Power Saving PAC with Solar charger and GPS (RoHS) (Asia Only, Except China)