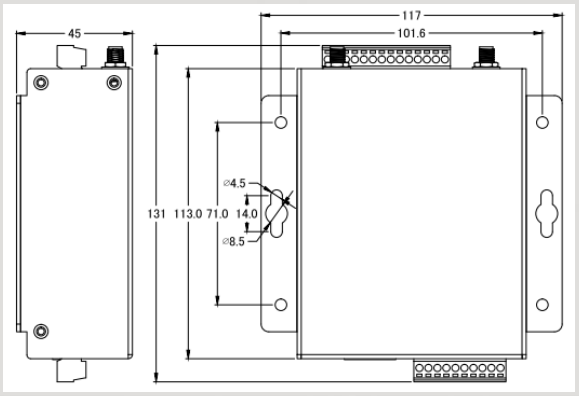
M2M Series Products

4G Gateway

GRP-540M Series



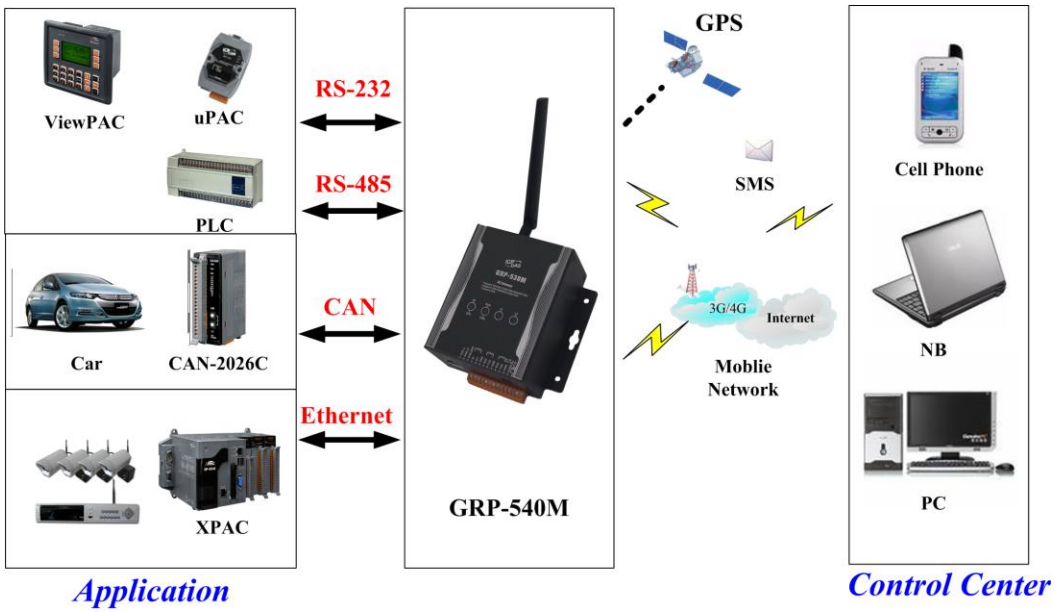
Dimensions

The GRP-540M provided by ICP DAS is a 4G gateway for Ethernet, serial port, and CAN. With GPS function, it can also be a GPS tracking system. It can be used in M2M application fields to transfer the remote I/O, Modbus data or video of the camera via 4G/3G/2G. Within the high performance CPU, the GRP-540M series can handle a large of data and are suit for the hard industrial environment. The GRP-540M have 4G module, Ethernet interface, and GPS module.

Features

- Support 4G FDD LTE / TDD LTE
- Support 3G WCDMA / TD-SCDMA
- Support 2G GSM
- 10/100 Base-TX compatible Ethernet controller
- Support CAN
- GPS : 32 channels with All-In-View tracking
- Support Micro SD card.
- Provide 4G Router function.
- Provide port mapping function.
- Serial Port to 4G Gateway Function
- High reliability in harsh environments
- DIN-Rail mountable

Application



Hardware Specifications

Item	GRP-540M-4GE	GRP-540M-4GA	GRP-540M-4GC
Software			
Gateway Function	Ethernet and Serial port (RS-232 x1, RS-485 x1) to 3G		
Embedded service	Web Server, 3G Router		
System			
CPU	ARM CPU		
EEPROM	16 KB (Data Retention: 40 years; 1,000,000 erase/write cycles)		
Expansion Flash Memory	SD Card (Max. 32GB SDHC)		
RTC(Real Time Clock)	Provide seconds, minutes, hours, day of week/month, month and year		
64-bit Hardware Serial Number	Yes		
Watchdog Timer	Yes		
LED Indicator	4 LEDs (RUN/PWR, 4G, L1, L2)		
Rotary Switch	Yes (0~9)		
GSM System			
Frequency Band	GSM : 850/900/1800/1900 MHz		
GPRS connectivity	GPRS class 12/10; GPRS station class B		
DATA GPRS	Downlink transfer: Max. 85.6 kbps; Uplink transfer: Max 42.8kbps		
3G System			
Frequency Band (MHz)	WCDMA 850/900/2100	WCDMA 850/1700/1900	WCDMA 900/2100 TD-SCDMA 1900/2100
Data Transmission	DC-HSPA+ Download: Max. 42 Mbps; Upload: Max 5.76Mbps TD-SCDMA Download: Max. 4.2 Mbps; Upload: Max 2.2Mbps		
4G System			
Frequency Band	FDD LTE: B1/B3/B5/B7/B8/B20	FDD LTE: B2/B4/B5/B12/B17	FDD LTE: B1/B3/B8 TDD LTE: B38/B39/B40/B41
Data Transmission	Download Max 100Mbps / Upload Max 50Mbps		
GPS System			
Support Channels	32		
Protocol Support	NMEA 0183		
Comm. Interface			
Ethernet	RJ-45, 10/100 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)		
COM1	RS-232 (RxD, TxD and GND); Non-isolated(Console, Debug)		
COM2	RS-232 (RxD, TxD and GND); Non-isolated		
COM3	RS-485 (D2+, D2-); 3000 VDC isolated		
CAN	CAN Bus (CAN_H, CAN_L)		
Mechanism			
Casing	Metal		
Dimensions(W x L x H)	117 mm x 126 mm x 58 mm (W x L x H)		
Installation	DIN-Rail / Screw		
Power			
Protection	Power reverse polarity protection		
Frame Ground Protection	ESD, Surge, EFT, Hi-Pot		
Required Supply Voltage	+10 V_{DC} ~ +48 V_{DC}		
Power Consumption	4.8W (200 mA @ 24 V_{DC})		
Environment			
Operation Temp.	-25℃ to 75℃		
Storage Temp.	-30℃ to 80℃		
Humidity	5~95% non-condensing		