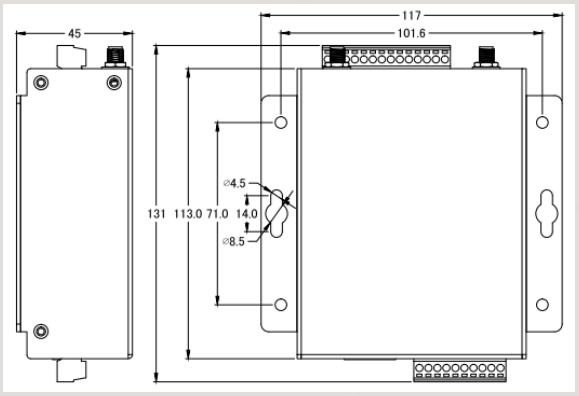
M2M Series Products

4G Gateway

GRP-540M Series



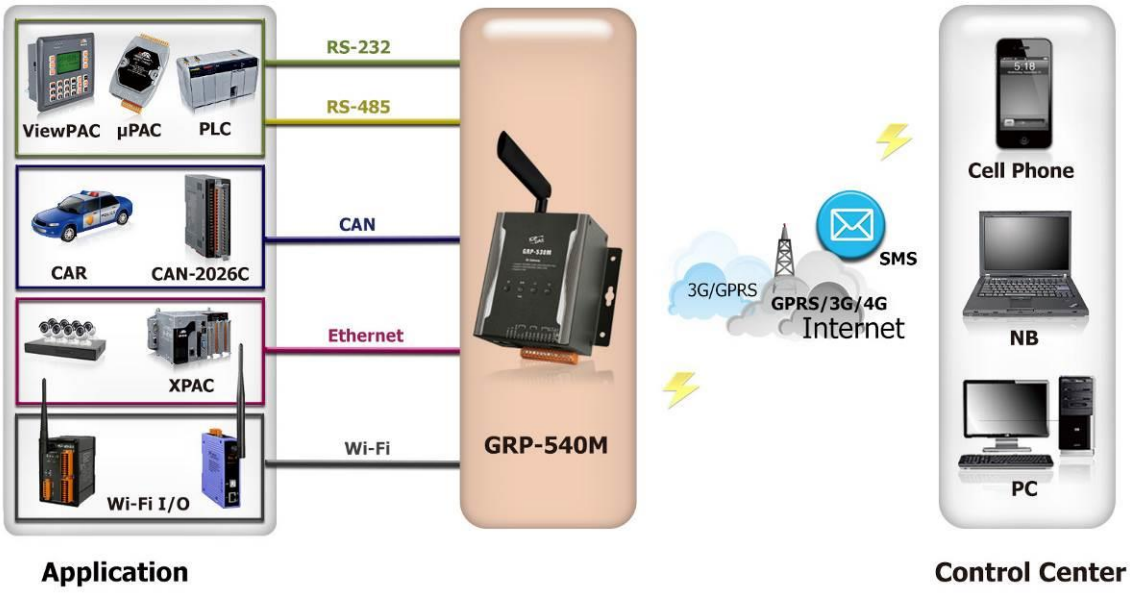
Dimensions

The GRP-540M provided by ICP DAS is a 4G gateway for Ethernet, Wi-Fi, 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
- Support Wi-Fi (GRP-540M-4GX-WF only)
- 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
- Support Dual SIM (GRP-541M only)

Application



Hardware Specifications

Item	GRP-540M-4GE GRP-541M-4GE	GRP-540M-4GE-WF	GRP-540M-4GC GRP-541M-4GC	GRP-540M-4GC-WF
Software				
Gateway Function	Ethernet, Wi-Fi and Serial port (RS-232 x1, RS-485 x1) to 3G/4G			
Embedded service	Web Server, Router function			
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 900/2100 TD-SCDMA 1900/2100 CDMA2000 (BC0) 800	
Data Transmission	DC-HSPA+ Download: Max. 42 Mbps; Upload: 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			
4G System				
Frequency Band	FDD LTE: B1/B3/B5/B7/B8/B20		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)			
Wi-Fi	N/A	IEEE802.11b/g/n, 2.4 GHz, channel 1-13	N/A	IEEE802.11b/g/n, 2.4 GHz, channel 1-13
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°C to 75°C			
Storage Temp.	-30°C to 80°C			
Humidity	5~95% non-condensing			