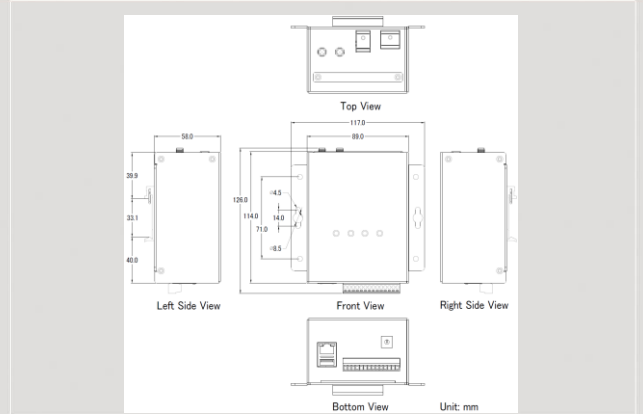




## 4G Gateway



GRP-541M Series



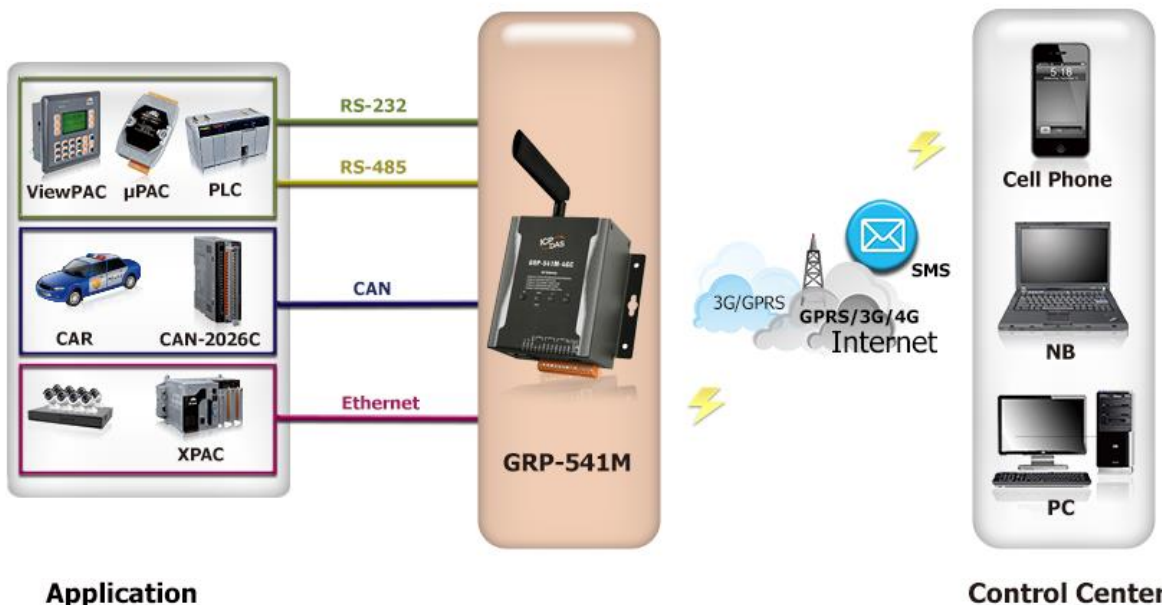
Dimensions

The GRP-541M provided by ICP DAS is a 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-541M series can handle a large of data and are suit for the hard industrial environment. The GRP-541M have 4G module, Ethernet interface, GPS module, and Dual SIM.

### 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 Dual SIM
- 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



Application

Control Center



## Hardware Specifications

Item	GRP-541M-4GE	GRP-541M-4GC
<b>Software</b>		
Gateway Function	Ethernet, Wi-Fi and Serial port (RS-232 x1, RS-485 x1) to 3G/4G	
Embedded service	Web Server, Router function	
<b>System</b>		
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)	
Dual SIM	Yes	
<b>GSM System</b>		
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	
<b>3G System</b>		
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	
<b>4G System</b>		
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	
<b>GPS System</b>		
Support Channels	32	
Protocol Support	NMEA 0183	
<b>Comm. Interface</b>		
Ethernet	RJ-45, 10/100 Base-TX (Auto-negotiating, Auto MDI/MDI-X, LED indicators)	
COM1	RS-232 (Rx/D, Tx/D and GND); Non-isolated (Console, Debug)	
COM2	RS-232 (Rx/D, Tx/D and GND); Non-isolated	
COM3	RS-485 (D2+, D2-); 3000 VDC isolated	
CAN	CAN Bus (CAN_H, CAN_L)	
<b>Mechanism</b>		
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	
<b>Power</b>		
Protection	Power reverse polarity protection	
Frame Ground Protection	ESD, Surge, EFT, Hi-Pot	
Required Supply Voltage	+10 V <sub>DC</sub> ~ +48 V <sub>DC</sub>	
Power Consumption	4.8W (200 mA @ 24 V <sub>DC</sub> )	
<b>Environment</b>		
Operation Temp.	-25°C to 75°C	
Storage Temp.	-30°C to 80°C	
Humidity	5~95% non-condensing	