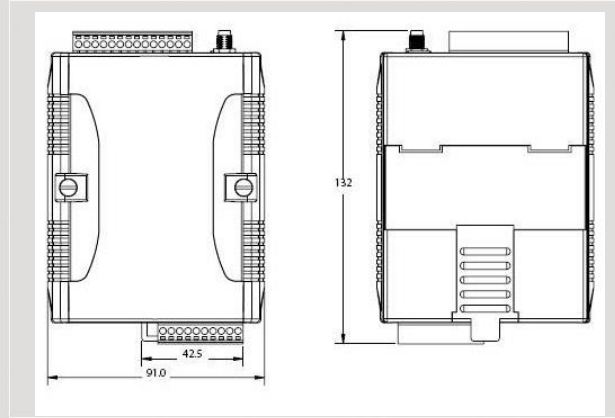# M2M Series Products

Intelligent NB-IoT Remote Terminal Unit with GPS
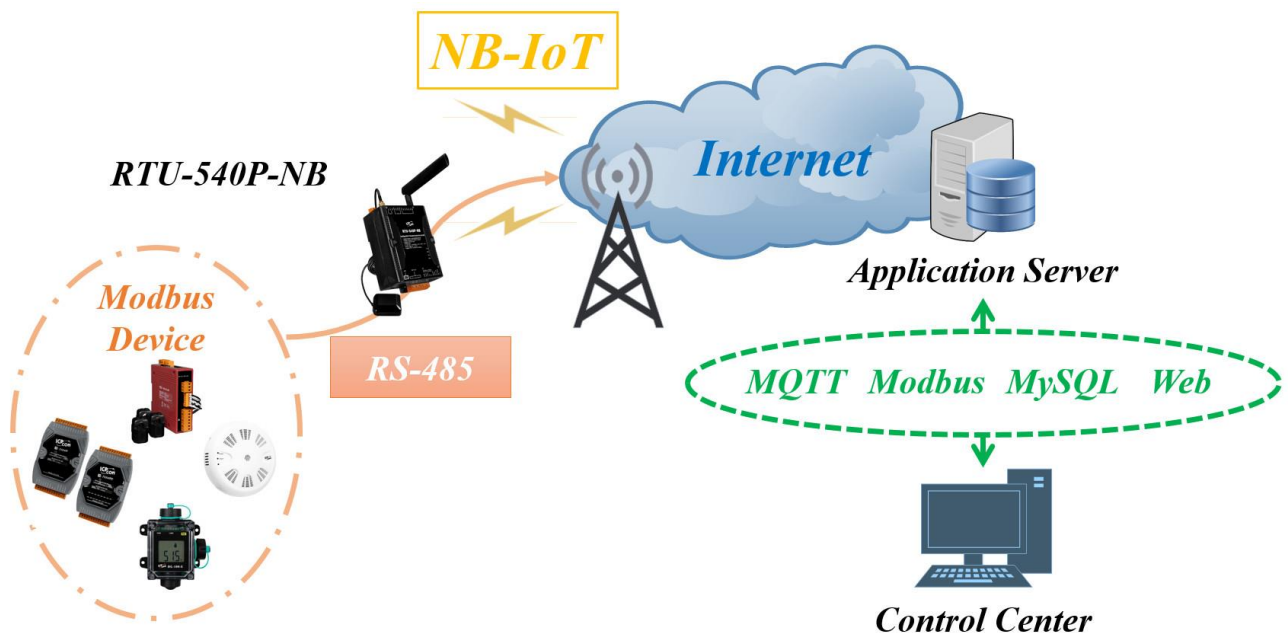

RTU-540P-NB

Dimensions

RTU-540P-NB is is an intelligent Active LTE NB-IoT Remote Terminal Unit with GPS. Within the high performance 32 bit CPU, RTU-540P-NB is suit for the hard industrial environment. When connecting with NB-DA Server or MQTT Broker, the user can also control the devices which connected to RTU-540P-NB from the remote control center. It features LTE NB-IoT module, 6 digital inputs, 2 digital outputs, 1 analog input, 1 RS-232, 1 RS-485 and micro SD interface.

Features

- Support NB-IoT
- Support GPS function
- Support Micro SD card
- Power Reverse Polarity Protection

- Support Modbus RTU
- Support MQTT
- Built-in Watch-dog Function
- Support 3.7V Li-ion Battery backup

Application

Hardware Specifications

System	
CPU	ARM Microprocessor
WDT(watchdog)	Yes
NB-IoT System	
Frequency Band	LTE NB-IoT B1, B3, B5, B8, B20, B28
Serial Ports	
Utility port(COM1)	RS-232: TxD, RxD, GND (use configuration and debug)
COM2	RS-485: D+, D- (use for communication with other devices)
Digital Input	
Input Channel	6
Input Type	Sink or Source, Isolated channel with common power or ground
Off Voltage Level	+1V max.
On Voltage Level	+3.5 ~ 30 VDC
Isolated Voltage	3750Vrms
Counters	6 (5~40Hz), Min. Pulse Width : 25ms
Digital Output	
Channels	2
Output Type	Open-Collector (NPN) (100mA@30VDC)
Load Voltage	+30 V max
Load Current	100 mA max
Isolated Voltage	3750Vrms
Analog Input	
Channels	1
Resolution	12 bit
Input Range/Type	0 ~ 20 mA
GPS Interface	
Support Channels	32
Protocol Support	GPRMC format (NMEA 0183 version 3.01)
Power	
Protection	Power reverse polarity protection
Frame Ground Protection	ESD, Surge, EFT, Hi-Pot
Required Supply Voltage	+10 VDC ~ +30 VDC
Environment	
Operation Temp	-25°C to 75°C
Storage Temp	-30°C to 80°C
Humidity	5~95% non-condensing

Ordering Information

RTU-540P-NB CR	LTE NB-IoT Remote Terminal Unit with GPS(RoHS)