



AP-M2M300 3G UMTS M2M Device

Modbus Gateway Application



AddPac

AddPac Technology

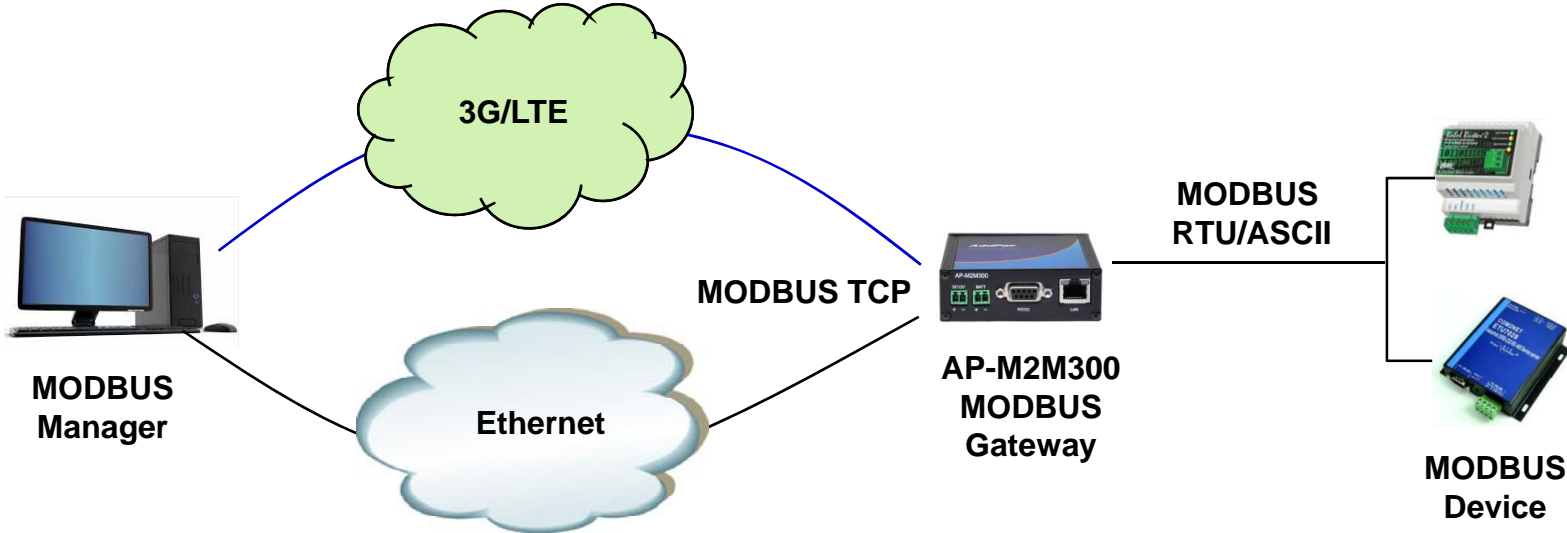
2016, Sales and Marketing

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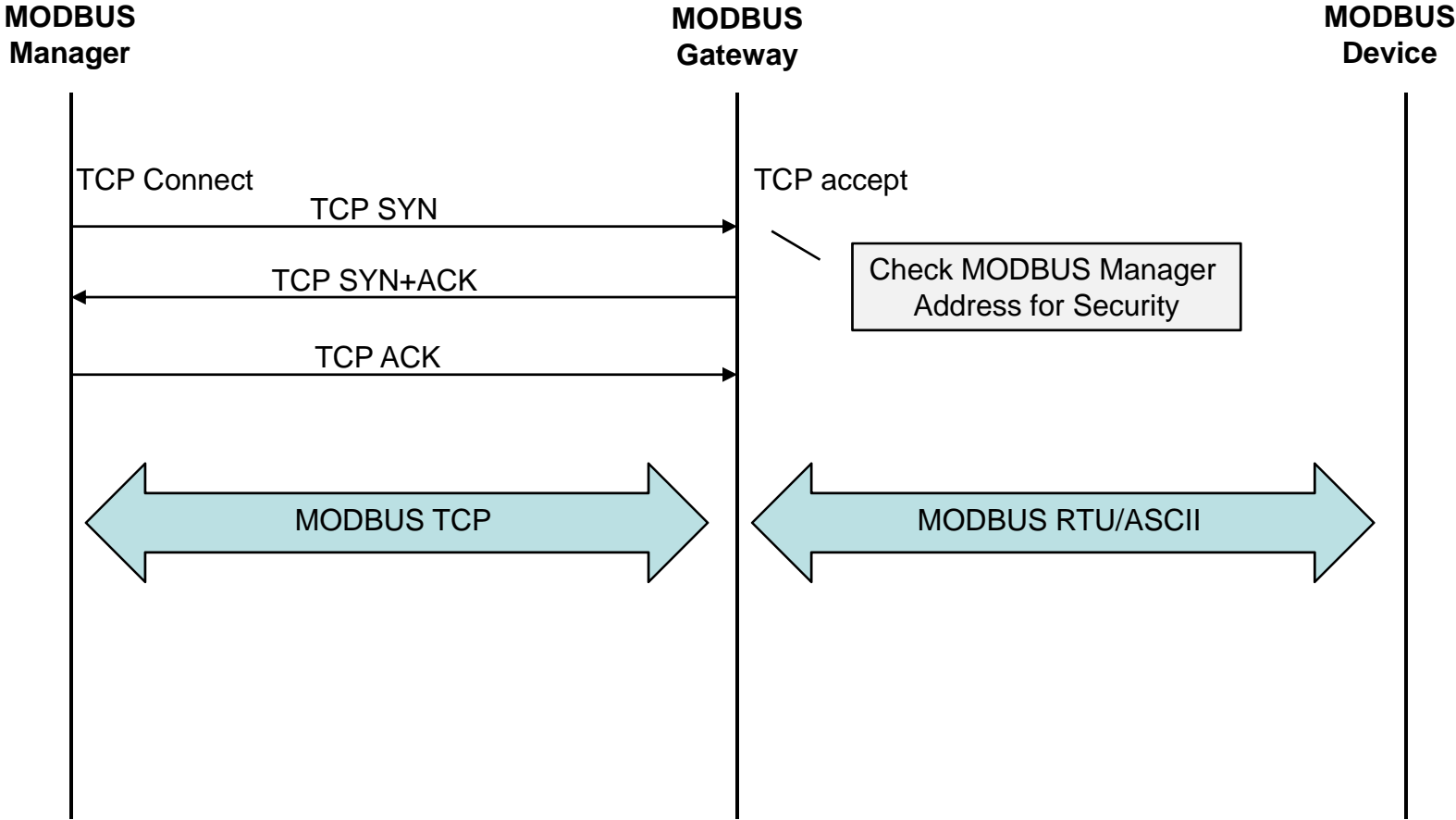
- Modbus Gateway Network Service Diagram
- TCP Protocol and Configuration for Public IP
- TCP Protocol and Configuration for Private IP
- Product Overview
- Hardware Specification
- 3G Module Specification
- Ordering Information



Network Service Diagram



MODBUS Gateway (Public IP Network)



MODBUS Gateway (Public IP Network)

- MODBUS Gateway
 - MODBUS manager can be connected directly.
 - The MODBUS gateway listen TCP (normally TCP/502)
 - The user can set access control for security (Optional).

- Configuration

!

modbus server

modbus port 502

modbus access-class ipv4 mbus-server

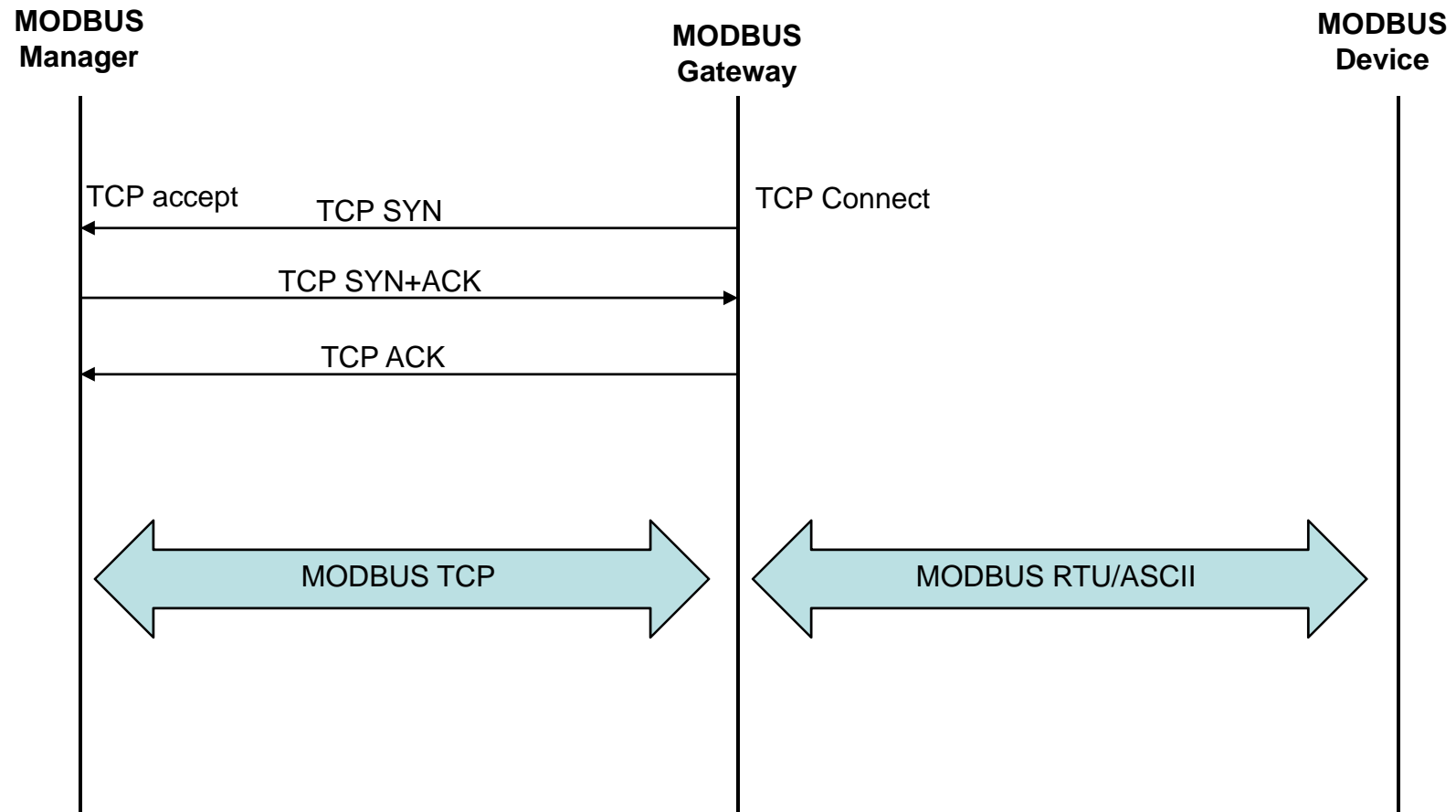
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Enable modbus server at gateway

Normally TCP/502
The user can change the value

Cisco style Access-list

MODBUS Gateway (Private IP Network)



MODBUS Gateway (Private IP Network)

- MODBUS Gateway
 - MODBUS manager **can't** be connected directly.
 - The manager listen TCP
 - The MODBUS gateway connect to Manager.
 - **Mainly used on 3G or LTE networks.**

- Configuration

!

modbus server passive

modbus manager modbus.addpac.com 502

modbus manager 124.32.125.3 3502

!

Enable modbus server at gateway (passive mode)

Set the Manager Information
(domain name or IP address format)

Product Overview

AP-M2M300 3G UMTS M2M Device

- High Performance RISC & Programmable Architecture
- 3G UMTS based Network Interface
- One(1) Antenna Port & USIM Card Slot Interface
- One(1) 10/100Mbps Fast Ethernet LAN Port Interface
- RS232C (DB9) Port Interface
- RS232/RS485 Interface(Selected by Internal DIP Switch)
- Two(2) Relay Out Interface
- Analog Voltage or Current Interface (Selected by Internal DIP Switch)
- Pulse or Alarm Input Interface (Selected by Internal DIP Switch)
- DC12V External Power Supply, Battery Input Interface (DC12V)
- Powerful Network Protocols (PPPoE, DHCP, Static Routing, etc)
- Firmware Upgradeable Architecture
- Smart Web Manager
- Smart NMS for Large Scale Deployment
- Light and Compact Design with External Power Supply

Hardware Specification

AP-M2M300 3G UMTS M2M Device

RISC
CPU

High-end
DSP

Network interface Configuration

Front Side



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Hardware Specification

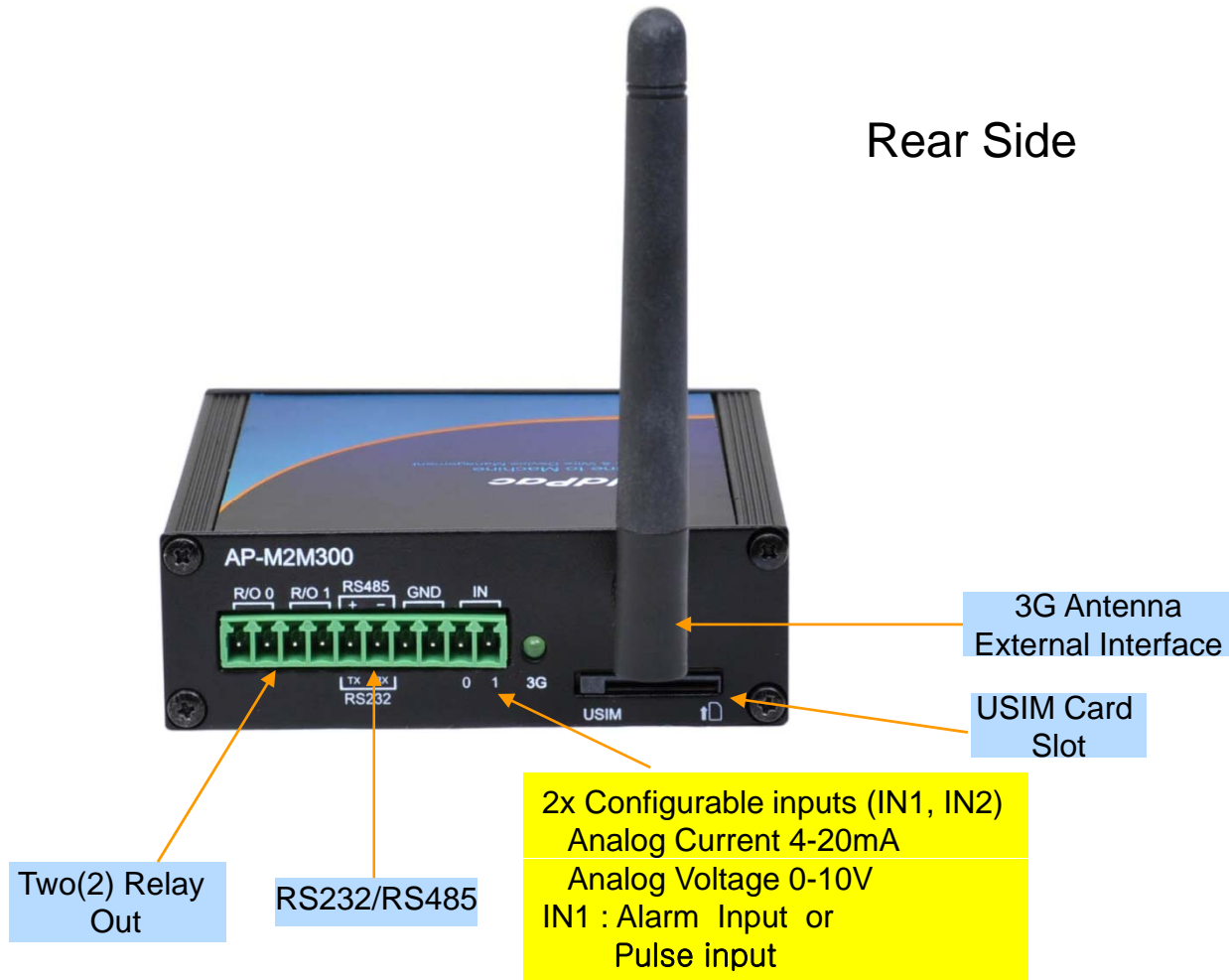
AP-M2M300 3G UMTS M2M Device

RISC
CPU

High-end
DSP

Network interface Configuration

Rear Side

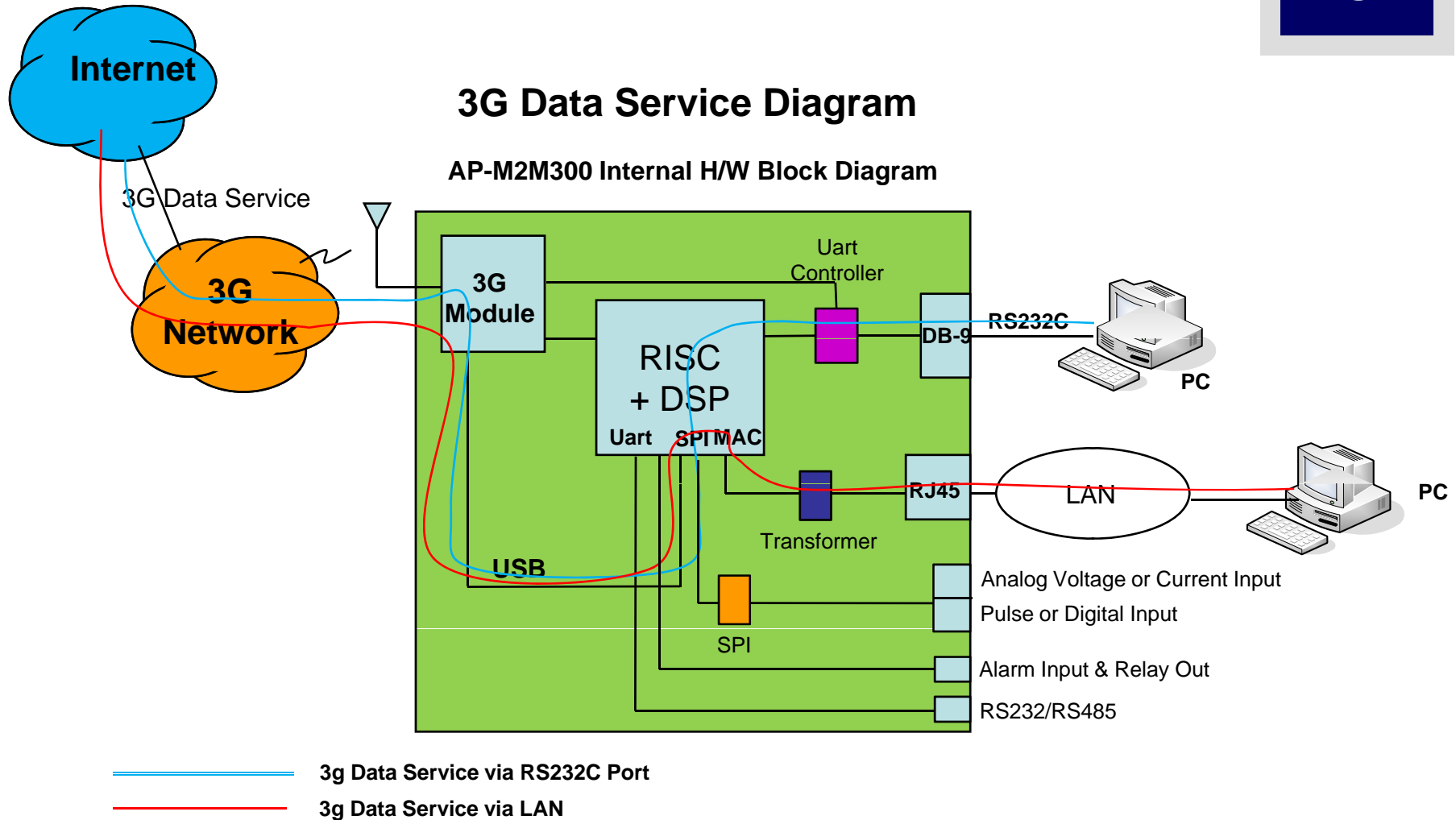


Hardware Specification

AP-M2M300 3G UMTS M2M Device

RISC
CPU

High-end
DSP



Hardware Specification

AP-M2M300 3G UMTS M2M Device

RISC
CPU

High-end
DSP

AP-M2M300 3G UMTS M2M Device	Basic Specifications
3G Antenna Interface	External 3G Antenna
USIM Card Slot	3G USIM Card Slot
Ethernet Interface	1-Port 10/100Mbps Ethernet Interface(RJ-45)
Serial Interface	1-Port RS232C Serial Interface Interface(DB-9)
Flash Memory	4Mbyte High-speed Flash Memory
Base Memory	32Mbyte High-speed SDRAM
I/O Interface	Analog Voltage (0 ~10V) (IN1, IN2)
	Analog Current (4~20mA) (IN1, IN2)
	Pulse Input or Digital Input (IN1)
	RS232/RS485 Interface
Power Requirement	Power Supply Adaptor / VAC 110~220V, 50/60Hz, 12V/1A
Operating Temperature	0°C ~ 45°C (32 °F ~ 122°F)
Storage Temperature	-40°C ~ 85°C (-40°C ~ 185°F)
Relative Humidity	5% ~ 95% (Non-condensing)
Dimension	28mm x 86mm x 95mm (H x W x D)
Weight (Kg)	0.32Kg

Hardware Specification

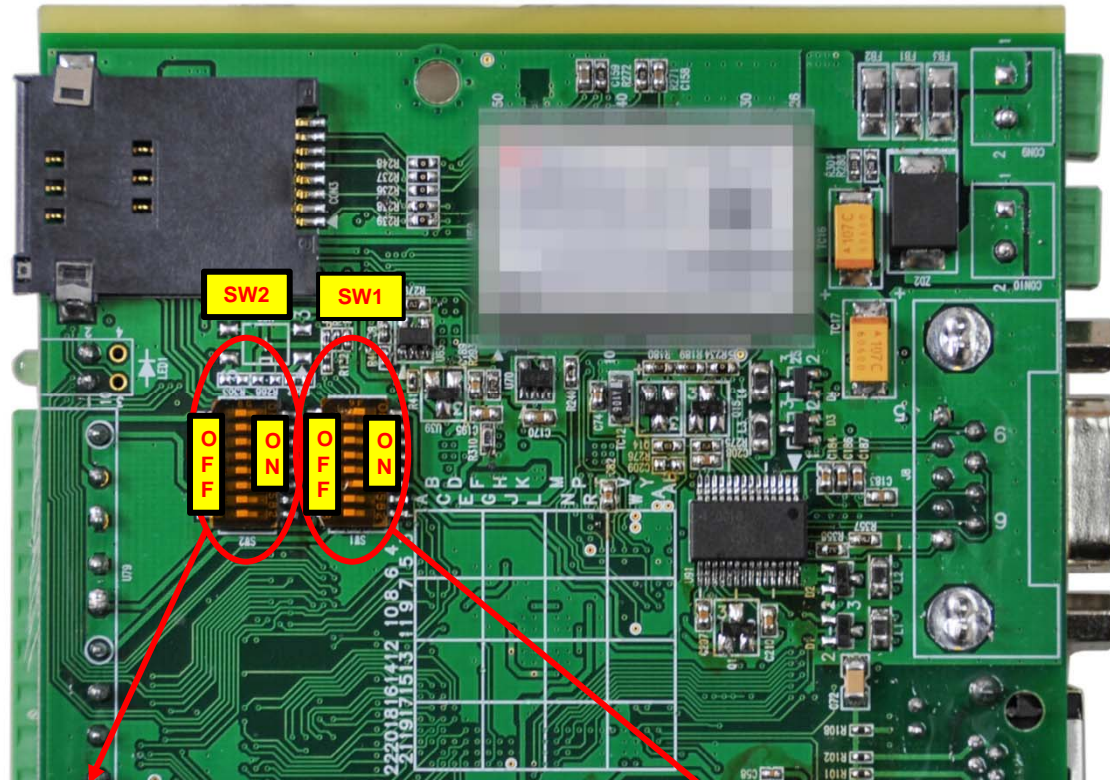
AP-M2M300 3G UMTS M2M Device

RISC
CPU

High-end
DSP

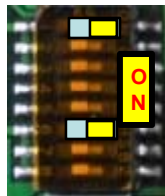
2x Configurable inputs (IN1, IN2)
Analog 4-20mA
Analog 0-10V

IN1 : Digital Input or Pulse input
=> CLI Configuration

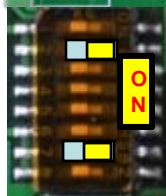


Current/Voltage & Pulse/Digital Input Switch

RS232/RS485 Dip Switch



Current



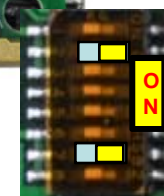
Voltage



Pulse or
Alarm Input



RS232



RS485

3G Module Specification

AP-M2M300 3G UMTS M2M Device

- ✓ **3G UMTS/HSDPA/HSUPA Characteristics**
 - Class A User Requirement : data & voice simultaneously
 - UMTS Terrestrial Radio Access FDD
 - 3GPP Release 6 High Speed Packet Access(HSPA)
 - Dual-band Support*(Option)
 - Band I (2100MHz),Band VIII (900MHz)
 - Dual-band Support* (Option)
 - Band II (1900MHz),Band V (850MHz)
 - WCDMA/HSDPA/HSUPA Power Class
 - Power Class 3 (24dBm) for WCDMA/HSDPA/HSUPA Mode
 - PS(Packet Switched) Data Rate
 - HSUPA category 6, up to 5.76Mbps UL
 - HSDPA category 8, up to 7.2Mbs DL
 - WCDMA PS data up to 384kbps DL/UL
 - CS(Circuit Switched) Data Rate
 - WCDMA CS data up to 64Kbps DL/UL

3G Module Specification

AP-M2M300 3G UMTS M2M Device

- ✓ 2G GSM Characteristics
 - Class B Mobile Station
 - Quad-band Support
 - GSM 850MHz, E-GSM 900MHz
 - DCS 1800MHz, PCS1900MHz
 - GSM Power Class
 - Power Class 4 (33dBm) for GSM/E-GSM bands
 - Power Class 1 (30dBm) for DCS/PCS bands

Ordering Information

- **AP-M2M300 3G UTMS M2M Device Hardware**
 - AP-M2M300 3G UMTS M2M Device Main Body
 - RISC Microprocessor with High-end Programmable DSP Architecture
 - 1-Port 3G Interface (Antenna, USIM Card Slot)
 - 1-Port 10/100Mbps Fast Ethernet(RJ45)
 - 1-Port RS232C Serial Interface (DB-9)
 - I/O Interface : Relay Out, Alarm Input, Analog Voltage, Current Input
 - Including Network Cable, Antenna & Ext. Power Supply, etc.
- **Built-in APOS Internetworking Software for AP-M2M300**
- **Including 1 Year Hardware Warranty**
- **Product Documents**
 - Install and Operation Guide (PDF)
- **Pricing**
 - AddPac Technology Regional Sales Manager
 - Authorized Sales and Marketing Representatives
 - Please Contact www.addpac.com

3G M2M Device Series

Thank you!

AddPac Technology Co., Ltd.
Sales and Marketing

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