



User Manual

Version 1.0.0 Jan 2024

M2M Device Manager

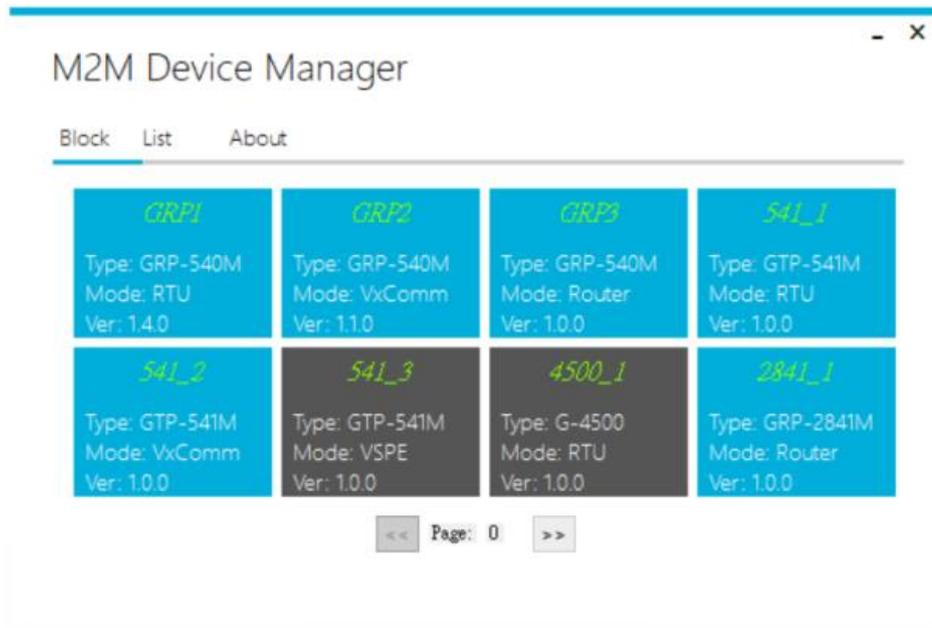


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Important Information

Warranty

All products manufactured by ICP DAS are under warranty regarding defective materials for a period of one year, beginning from the date of delivery to the original purchaser.

Warning

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Contact us

If you have any problem, please feel free to contact us. You can count on us for quick response.

Email: service@icpdas.com

1. Introduction

M2M Device Manager is the device management software for M2M series. It is convenient to manage M2M devices remotely, and provides users with the convenience of managing multiple M2M devices at the same time. This software supports remote device setting, time correction and firmware update functions, suitable for GRP series, GTP-541M, G-451x series products. With ICP DAS' RTU Center or VxServer software, you can easily build a remote equipment monitoring system.

1.1 Features

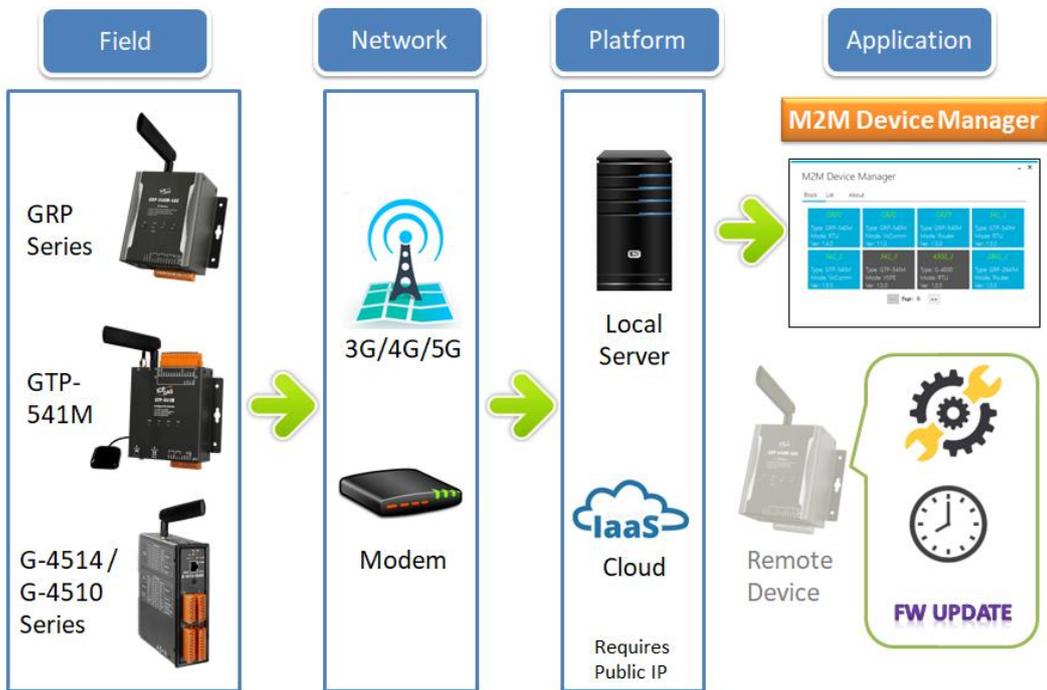
- Remote device management
- Device time correction
- Device settings upload/download
- Firmware update
- Windows-based software
- Up to 1024 devices can be managed in one M2M Device Manager software

1.2 Product Support

Model	Description
GRP-540M series	3G / 4G gateway
GRP-2841M series	4G / 5G / Ethernet gateway
GTP-541M series(*)	Intelligent 4G Controller with GPS
G-4514-4G series(*)	4G LTE Power Saving PAC with Solar charger
G-4510 series(*)	Power Saving PAC with Solar charger and optional communication module

* : Only supported in some pre-delivered firmware (available soon)

1.3 Application



1.4 System requirement

- Software requirement:

Operating system Version	Support
Windows 7	✓
Windows 8	✓
Windows 10	✓
Windows 11	✓

- Hardware requirement:

Hardware Items	Requirement
CPU	1.0 GHz or higher
RAM	2 GB or higher
Storage	32 GB or higher

- Network requirement: Requires a public IP or VPN network

2. Installing .NET Compact Framework

It needs the runtime environment with .NET Framework 4.0 or above to execute the M2M Device Manager in the PC. If there has .NET Framework 4.0 or above on the PC, users can omit this chapter.

Download .NET Framework 4.0 from the link below and install it.

◆ Microsoft .Net Framework Version 4.0:

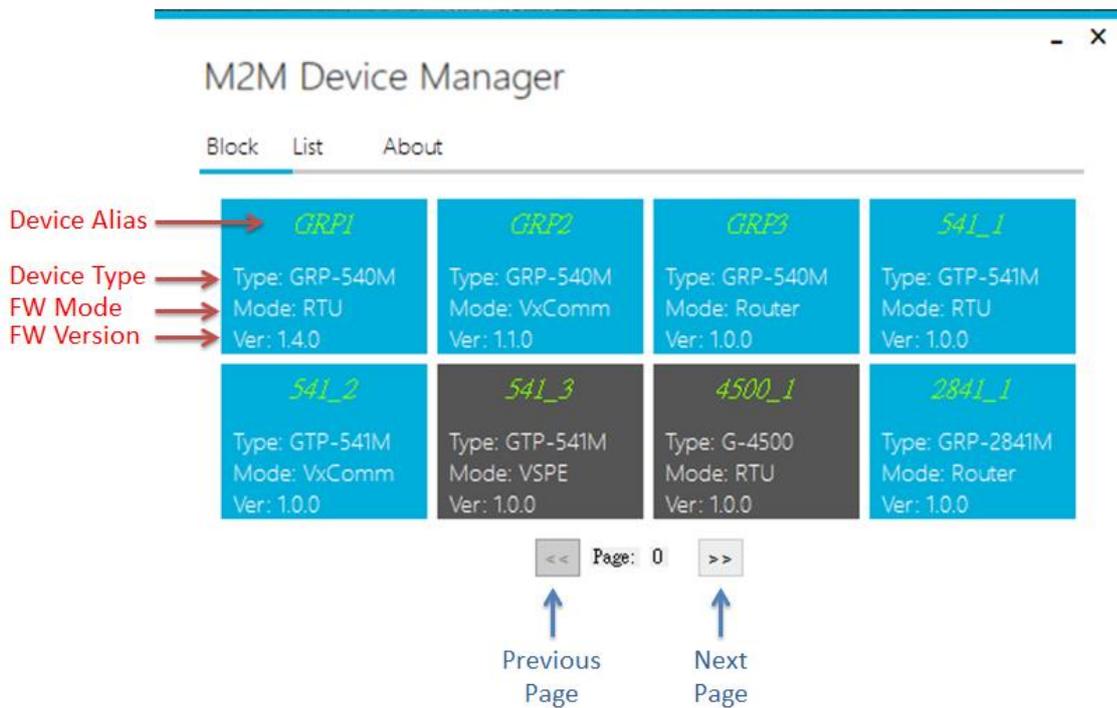
<https://dotnet.microsoft.com/en-us/download/dotnet-framework/net40>

3. M2M Device Manager operation

Device information and connection status will be displayed in a block or table list, the user can choose how to display it.

3.1 Block

Device online/offline status and basic information will be displayed here as a block icon. When the block icon color is blue, it means the device is online, and when the block icon color is black, it means the device is offline.



Device Alias:

The device alias of the slave device, each slave device must have a unique alias, which cannot be repeated with other devices.

Device Type:

Indicates the device type of the slave device.

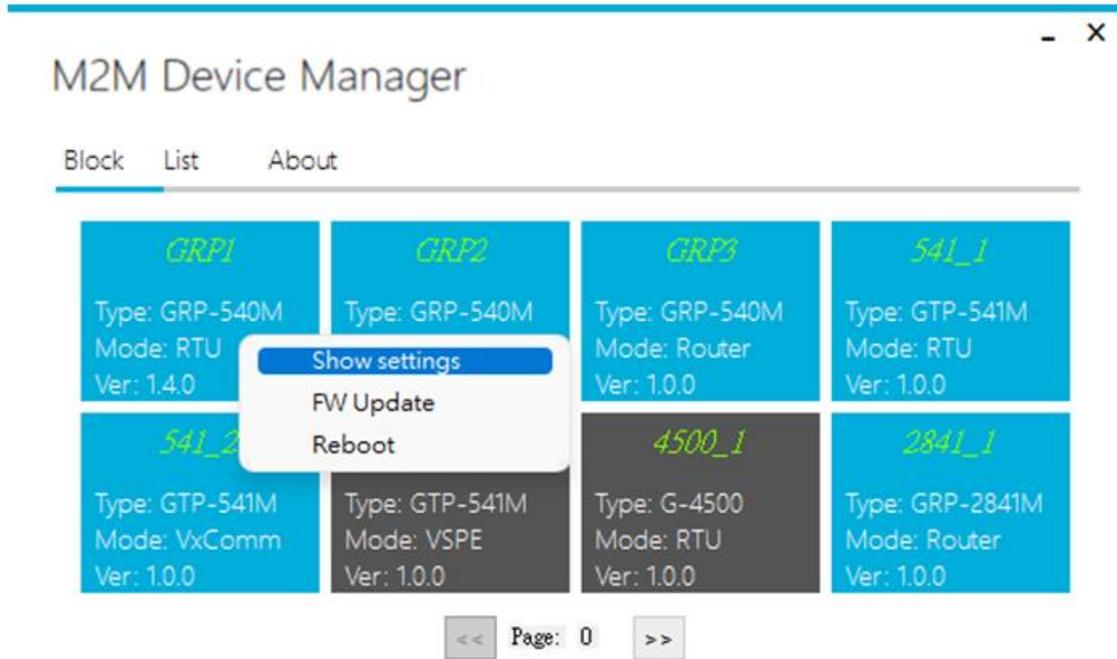
FW Mode:

Indicates the firmware mode of the slave device.

FW Version:

Indicates the firmware version of the slave device.

When the user clicks on the blue block icon, the list menu will be displayed as shown in the image below.



3.1.1 Show settings

The device settings will be displayed here. Users can download settings to the device or upload settings from the device.

Current setting status

Item	Value
Ethernet	
Ethernet 0	
IP Address	192.168.255.1
Mask	255.255.255.0
Gateway	
Ethernet 1	
IP Address	10.0.255.1
Mask	255.255.255.0
Gateway	

File

Load Default Load Settings Save Settings

Device

Download Upload Abore

Users can edit the values in the list to change device settings or click the 'Web UI' button to open the UI.

The "Web UI" button appears only if the slave device has a supported device user interface.
EX: GRP-540M / GRP-2841M device, as shown in the below.

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Network

- [Ethernet](#)
- [WLAN](#)
- [PIN/APN](#)
- [Network Reconnection](#)
- [DNS](#)
- [DDNS Client](#)
- [VPN](#)
- [DHCP Server](#)
- [Routing](#)

System

- [Reboot Timer](#)
- [Time](#)

VxServer

- [VxServer](#)

RTU Client

- [Main Info](#)
- [Modbus Device](#)
- [FTP/Email](#)

RTU CAN Client

- [Basic config](#)
- [CAN config](#)
- [FTP/Email](#)

PIN / APN Configure

SIM 1

PIN Code: 0000

Phone Number: *99***1# (1)

APN: internet (2)

User Name: (2)

Password: (2)

Modify

(1):usually use *99# or *99***1#
(2):please ask your SIM Card provider

Current setting status: Used to display the current setting status

- Default settings: Currently set to default.
- User settings: The current setting is modified by the user.
- Current settings: The current setting is the current setting on the device.

3.1.2 FW Update

Users can update firmware to device by this function. To enable this feature, the device firmware must be placed in a specific directory.

The firmware placement path must be: {program path}/fw/{device type}/{firmware mode}/*.fw

EX: C:\M2M_DEV_Manager\fw\GRP-540M\RTU\patch_v1.0.1.fw

Firmware Update

Firmware

C:\patch_v1.0.1.fw

Device

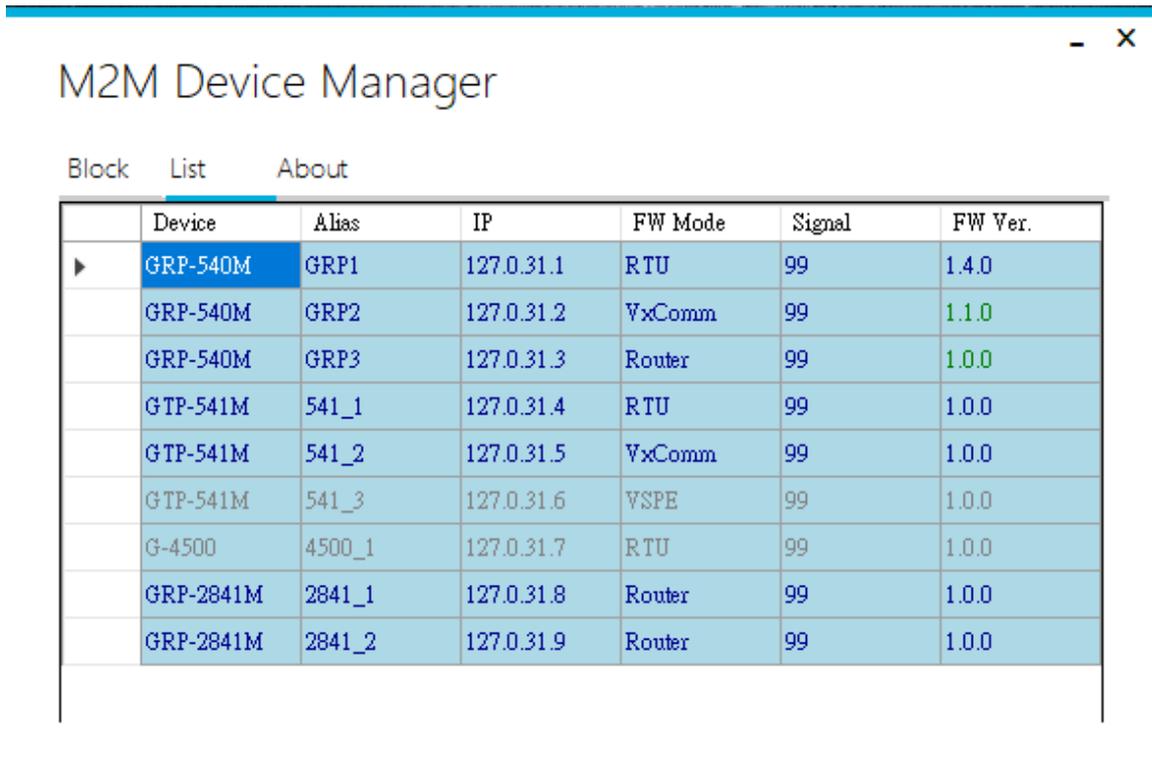
3.1.3 Reboot

Users can restart the device through this function.

3.2 List

Device online/offline status and basic information will be displayed in a list here.

Text in blue font means the device is online and text in grey font means the device is offline.



The description of the list field is as follows:

- Device: show device type of the slave device.
- Alias: show alias of the slave device, each slave device must have a unique alias, which cannot be repeated with other devices.
- IP: show IP of the slave device.
- FW Mode: show the firmware mode of the slave device.
- Signal: show the signal strength of the slave device.
 - 0: -113dBm or less
 - 1: -111dBm
 - ...
 - 31: -51dBm or greater
 - 99: unknown or not detectable
- FW Ver.: show the firmware version of the slave device.

When the user right clicks on the device list, the list menu will be displayed as shown in the image below.

M2M Device Manager

Block List About

	Device	Alias	IP	FW Mode	Signal	FW Ver.
▶	GRP-540M	540_1	127.0.31.1	RTU	99	1.4.0
	GRP-540M	540_2	127.0.31.2	VxComm	99	1.1.0
	GRP-540M	540_3	127.0.31.3	Router	99	1.0.0
	GTP-541M	541_1	127.0.31.4	RTU	99	1.0.0
	GTP-541M	541_2	127.0.31.5	VxComm	99	1.0.0
	GTP-541M	541_3	127.0.31.6	VSPE	99	1.0.0
	G-4500	4500_1	127.0.31.7	RTU	99	1.0.0
	GRP-2841M	2841_1	127.0.31.8	Router	99	1.0.0
	GRP-2841M	2841_2	127.0.31.9	Router	99	1.0.0

3.2.1 Show settings

See Section 3.1.1

3.2.2 FW Update

See Section 3.1.2

3.2.3 Reboot

See Section 3.1.3

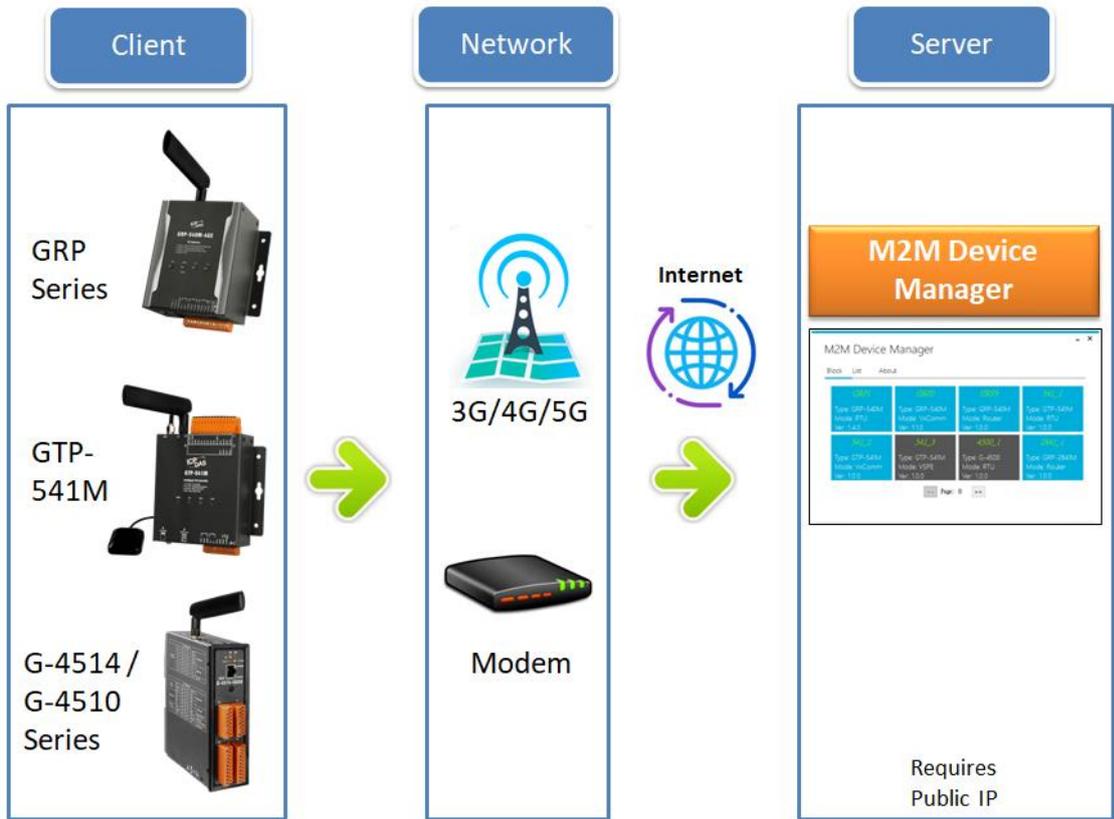
3.3 About

Software version information will be displayed here.



3.4 How to connect to M2M Device Manager

Network connection architecture as shown in the below. Server side must have a public IP or VPN network



Different devices may have different settings interface. The user needs to set the server address and device alias.

For example:

M2M Dev Client	
Server	<input type="text" value="192.168.12.1"/>
Alias	<input type="text" value="0F876C910000"/>
<input type="button" value="Modify"/>	

Server: Need to fill in the server IP address or domain name.

Alias: Users can set the device alias by themselves. However, this alias must be unique and cannot be duplicated with other devices.

After completing the settings, you need to restart the device for the settings to take effect.

Appendix A. Revision History

This chapter provides revision history information to this document.

The table below shows the revision history.

Version	Date	Description of changes
1.0.0	2024-01-17	The First Release Revision