

## NetPortServer Wireless Din-Rail RS232/422/485 to WiFi Device Server with Modbus and MQTT Support

### NPS6151

RS232/422/485 Wireless Serial Device Server

The NPS6151 is a compact industrial wireless RS232/422/485 device server and IoT gateway, ideal for industrial use. It combines functions like a serial device server, Modbus gateway, MQTT gateway, Serial-to-JSON gateway, and virtual COM port tool. Equipped with one RS232/422/485, 802.11b/g WiFi, and an RJ45 Ethernet port, it ensures reliable connectivity. It converts RS232/422/485 to WiFi TCP/IP and integrates Modbus RTU to TCP, with WiFi functioning as a client or AP. Its DIN-rail/desktop mount design supports easy installation, while the wide power input range (10–30VDC) and Virtual COM tool make it a cost-effective, space-saving solution.



### Features & Benefits

#### Modbus RTU /Ethernet Gateway

- Integrated Serial Port Server (Serial Device Server)
- Modbus RTU Server/ Client
- Modbus RTU to MQTT Gateway
- Cloud JSON data to Modbus RTU
- TCP Server/ Client, UDP, UDP Multicast
- TCP Server
- Auto-Polling Storage Multi Modbus/TCP Client to Single Modbus RTU Server
- Cloud Modbus/TCP to Modbus RTU Client Access

#### Modbus Gateway

- Modbus RTU protocol to Modbus/TCP
- RTU/Register Auto Polling and Storage
- Allows Multiple points access same serial device
- Scheduling Polling Modbus RTU register

#### JSON to Modbus RTU

- CSV JSON Table
- Scheduling Polling Modbus RTU register
- Scheduling Publish in JSON format
- Subscribe support request and Setting Modbus Register

#### Wireless

- WiFi AP, WiFi Client, WiFi to Ethernet Router
- Security WEP/WPA-PSK/WPA2-PSK
- Data Encryption WEP64/WEP128/TKIP/AES

#### Modbus RTU to MQTT

- Publish RTU data in JSON format
- Subscribe JSON to Modbus RTU by HTTP Post, HTTP Get
- NTP support for Network Time Synchronize

#### Serial Device Server

- TCP/UDP Transmission to virtual serial port
- Support Virtual COM Software tool

#### Serial Interface

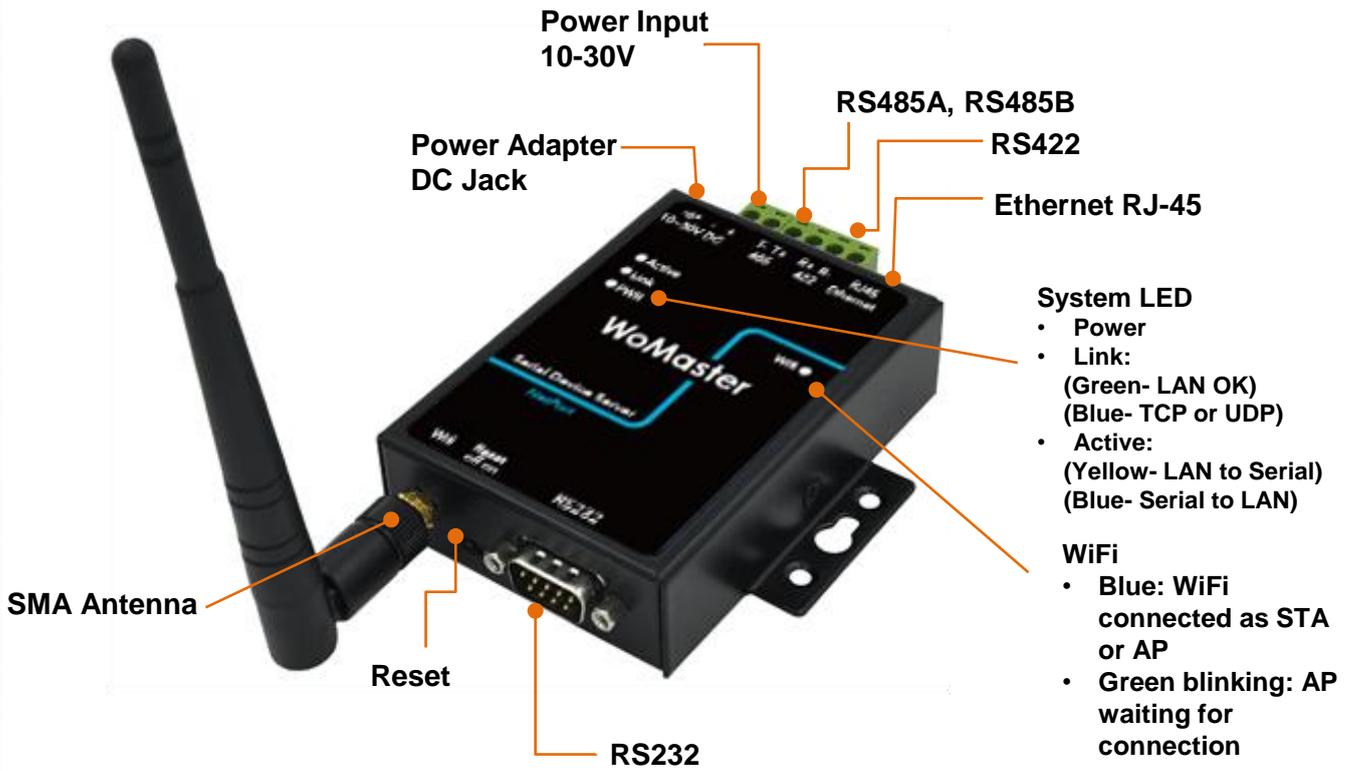
- One RS485 terminal with RS485-A, RS485-B, 2-Wires, up to 32 devices
- Baud Rate Support – 300bps ~115200bps, 5-9bits
- Parity Check – None, Odd, Even, Mark, Space

#### Industrial Application

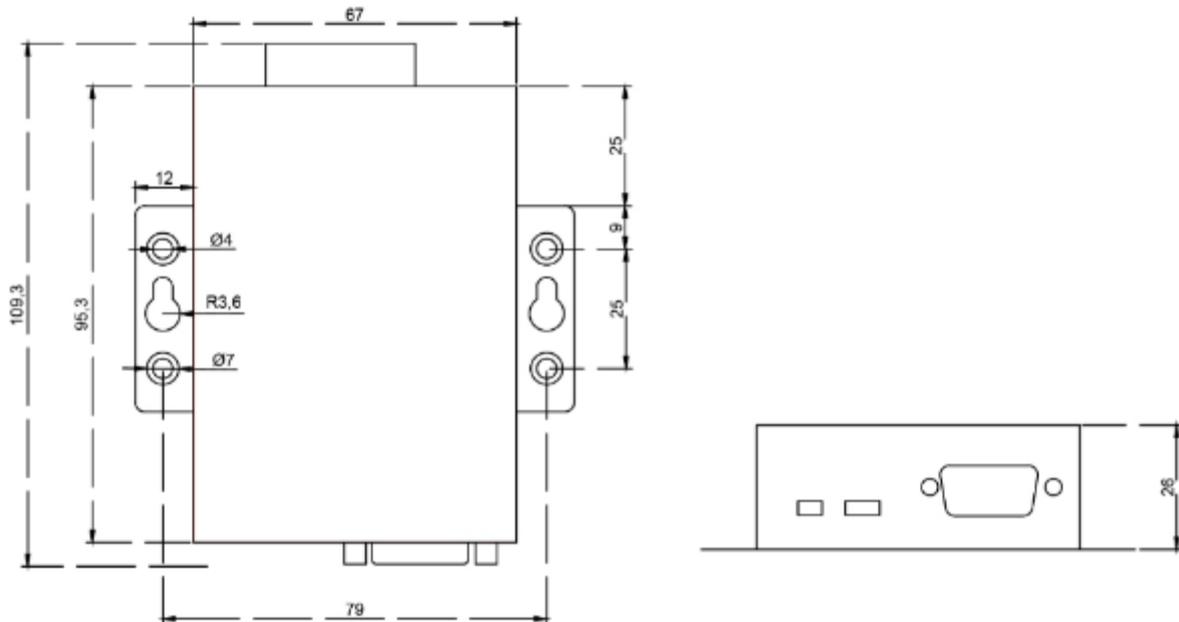
- DC 10~30V Power Input, Terminal Connector
- -25~75°C / 5~95% RH Environment Operating Temperature



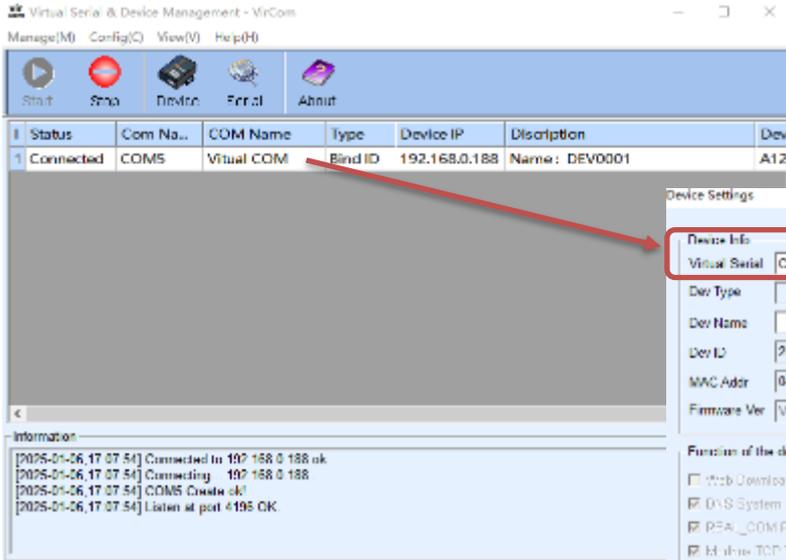
## Interfaces



## Dimensions

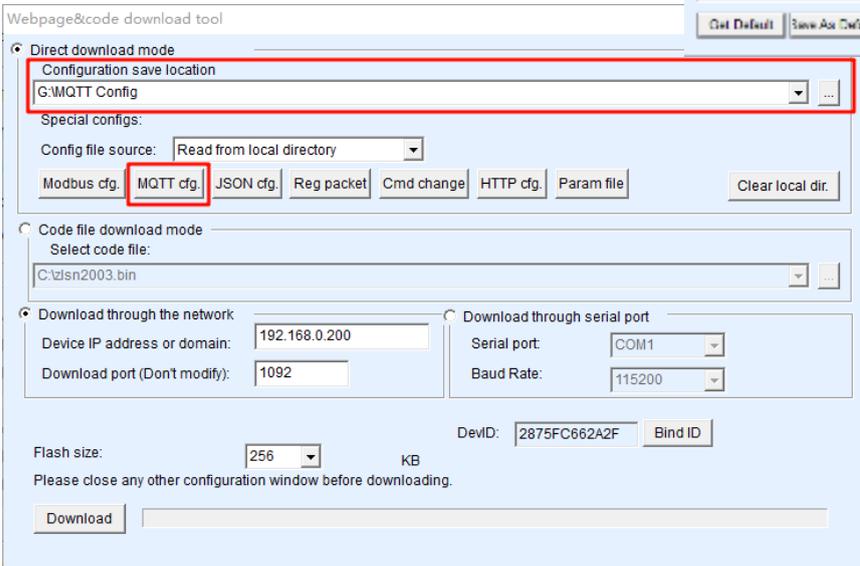


✓ Virtual COM Device Discovery and Management

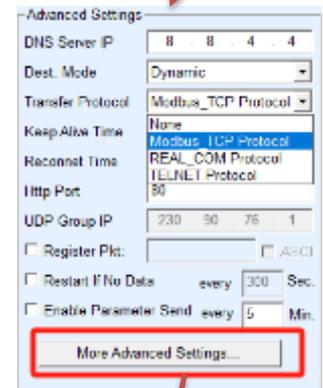


✓ Device Setting

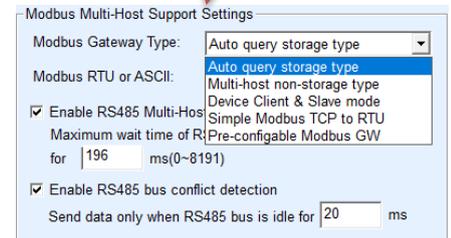
✓ Cloud MQTT Configuration



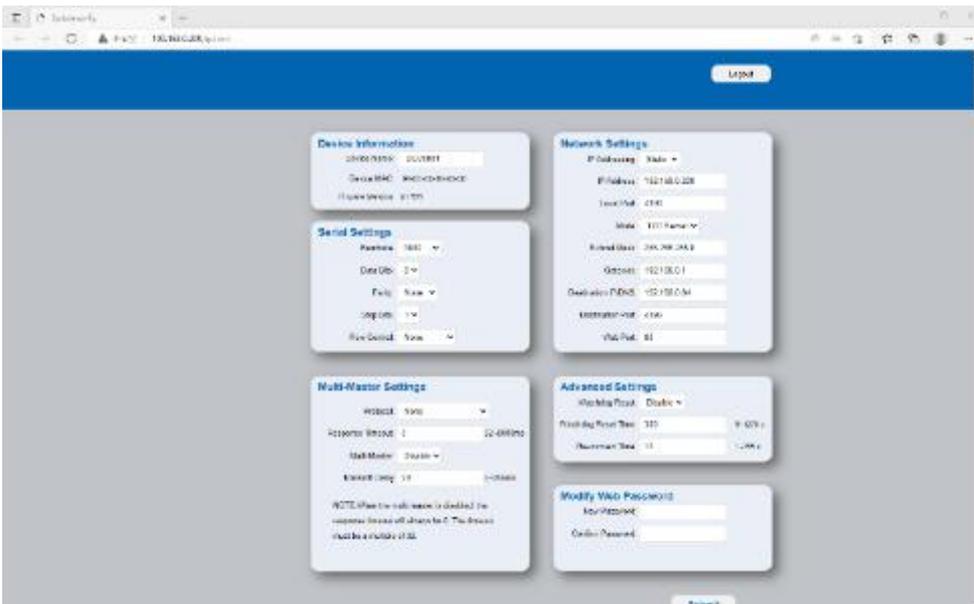
Save Setting



Multi Modbus Host



✓ Web Configuration



| Network Interface                 |   |
|-----------------------------------|---|
| <b>Ethernet</b>                   | 10/100M RJ45  |
| <b>Wireless</b>                   | 802.11b/g WiFi  |
| Serial Interface                  |   |
| <b>Connector</b>                  | RS232: DB9; RS422: Terminal ; RS485 Terminal  |
| <b>Serial Parameters</b>          | Baud Rate: 1200~115200bps, Data Bit: 5~9<br>Parity Check: None, Odd, Even, Space, Mark<br>Flow Control: None Flow Control                                     |
| Service Mode                      |   |
| <b>Virtual COM Driver</b>         | Windows XP / Windows 7 / Windows 10/ Windows 11   |
| <b>Wireless</b>                   | STA (Client) / AP   |
| <b>Security</b>                   | WEP/WPA-PSK/WPA2-PSK  |
| <b>Encryption</b>                 | WEP64/WEP128/TKIP/AES   |
| <b>TCP</b>                        | TCP Server for up to 30 TCP clients, or TCP client to up to 7 destination IP  |
| <b>UDP / UDP Multicasting</b>     | UDP Polling & Response by UDP packet between stations<br>UDP Multicast to all station by UDP packet   |
| <b>Modbus</b>                     | Modbus RTU to Modbus TCP<br>Modbus TCP to Modbus RTU  |
| <b>Cloud</b>                      | MQTT, JSON to Modbus RTU, HTTP Post, HPPT Get   |
| Network Feature                   |   |
| <b>Protocol</b>                   | Ethernet, IP, TCP, UDP, HTTP, ARP, ICMP, DHCP, DNS, Modbus  |
| <b>Security</b>                   | TCP with authentication key   |
| <b>DHCP</b>                       | DHCP Client for IP and DNS information from DHCP server   |
| <b>NTP</b>                        | Network Time Precision (NTP)  |
| Management                        |   |
| <b>System Management</b>          | Windows Utility, Virtual COM, WEB Management  |
| <b>Windows DLL Library</b>        | Device management function library (Windows DLL dynamic link library) by VC, VB, Delphi, or C++ Builder with functions such as <i>read</i> and <i>write</i> . |
| Power Input & Interface Connector |   |
| <b>Power Input</b>                | 10~30VDC Input, Terminal Block, DC Jack   |
| Wireless                          |   |
| <b>Frequency</b>                  | 2.412GHz-2.484GHz   |
| <b>Transmit Power</b>             | 802.11b: +20dBm(Max.);<br>802.11g: +18dBm(Max.)   |
| <b>Sensitivity</b>                | 802.11b: -89dBm;<br>802.11g: -81dBm;  |
| <b>Antenna</b>                    | SMA External  |

| Mechanical & Installation |   |
|---------------------------|---|
| Installation              | Din-Rail, Desktop   |
| Enclosure                 | Metal   |
| IP Protection             | IP20  |
| Dimension                 | 94x65x25mm (LxWxH), Packing Box160x123x79mm, 52pcs per Carton |
| Environmental             |   |
| Operation Temperature     | -25°C~70°C, 0% ~ 90%, Non-Condensing                          |
| Storage Temperature       | -40°C~80°C, 0% ~ 90%, Non-Condensing                          |
| Reliability & Warranty    |   |
| MTBF                      | > 200,000 Hours   |
| Warranty                  | 3 Year  |



## Ordering Information

| Model         | Description  |
|---------------|--|
| NPS6151E/U/UK | Wireless One-port RS232/422/485 Device Server, Modbus, MQTT Gateway,<br>10~30Vdc<br>- Quick Installation Guide<br>- 1 x DB9 cable (Female-Female)<br>- 1 x 1m RJ45 cable<br>- 1 x WiFi Antenna<br>- Power Adapter (EU/US/UK)<br>- Din-rail Kit |