



Intelligent PDU for Enterprise

Novum-Tec V model is an Intelligent PDU for businesses and enterprises. It is an intelligent power distribution device that can monitor, manage, control, and automatically turn ON/OFF according to conditions (intelligent controlling) in real time via the local area network (LAN) or the internet.

Multi-step automation can help troubleshoot IT equipment with an IP that hangs such as scheduling, ping-monitoring behavior settings, and other operations settings. It is also a power-ON delay to prevent instability when multiple devices are started.

Hardware features

The device is made of powder-coated metal. It supports installation in racks and equipment cabinets with DIN rails. All device statuses are displayed on the front panel LEDs and the web app which users can monitor in real-time. Other features are

1. High-quality triple Thermally Protected Metal Oxide Varistor (TMOV) for Surge Protection (Transient only) with real-time state of the varistor.
2. Have two Power Switch port communication cable channels for managing ON/OFF the mainboard of the computer on-site by working through a web application.
3. There is a system to detect the rotation status of the machine's fan. and tell the fan operating status on the web application
4. There are communication channels for Ethernet (RJ45 type 100/1000 Base-T) and Wireless Networks (IEEE802.11 g/n) and can be connected simultaneously as a Redundancy system for each other.
5. Rack mounting bracket installable 5 positions can easily be installed on a wall, cabinet, rack-mount, or when not in use.
6. All LED statuses and symbols on the front panel are shown in Dashboard (in Real-time)
 - Power status: When power is ON, the LED will bright.
 - Output status: When the channel activates (ON), the LED is bright.

- System status: When the system is ready, the LED will bright and there will be three consecutive beeps. Ready to display on the Dashboard page.
- WiFi status: When WiFi is connected, the LED will bright and show on the Dashboard page.
- Earth Status: When the wire of the earth system is connected, the LED is bright and shows on the Dashboard page.
- Surge status: Normally, the LED will not bright but when there is a surge, the LED will red blinks and show on the Dashboard page.

Note: When the LED red blinks, the device needs to change some varistors inside.

7. Accept a total current of up to 30A and have terminal block electrical outlet channels for all electrical outlet channels accept no less than 10A and have additional plug-in power outlet channels for convenience in use.

8. The device supports operating temperatures from -10 to 50 degrees Celsius (with conditions).

9. The device can connect via the internet and work with the Novum-Tec cloud server system.

10. The device supports working with controllers through a LAN or VPN network in a centralized manner.

11. Software system that can work with additional Novum-Tec sensors to set conditions for ON/OFF electrical outlet channels.

12. The device has a notification system via LINE notify or e-mail via the Internet. So that users can be aware of usage or problems.

13. The device has a warranty for not less than 1 year (Novum-Tec has a 1-year warranty. You can purchase an additional warranty for up to 5 years for all models).

14. Only have an operating system (OS) installed on the machine and a valid license.

Software features

Take control of the V Model on the Web App or IP Address on the Local Area Network. Able to log in a user to more than one device at the same time with color themes for users to change on the web app of Novum Cloud. Flexible software operating systems support Windows, iOS, Linux, and Android and can be used through web browsers Chrome, Firefox, Opera, Microsoft Edge, and Safari. Can be used through smartphones, tablets, laptops, and computers. Along with a system to monitor current, voltage, and power with a resolution of 2 decimal places, there is also control at the Local Area Network for convenient and appropriate use. In addition, the Log File can be used at any time to view past activities. You can purchase additional storage space for optimum use. Supports the use of a 10 V model Intelligent PDUs simultaneously by using one IP address to display and control on a single screen (Mesh Topology) without using a controller. or cloud system.

➤ Control:

Configure: All manual control modes are available to manage ON/OFF/Restart the Real-time electrical individual outlet channel and manage devices independently.

GROUPING: The rebuilding of PDUs by arranging the relay in the software. The Split Group is several relays in one PDU that become more than one PDU, and on the other hand, the Merge Group is several relays from two or more PDUs that become one PDU to facilitate managing large loads categorically.

➤ Dashboard:

Realtime: The real-time operating status and environment of the Novum client can be monitored through the web application, such as CPU usage, RAM usage, Storage usage, CPU temperature (°C), relative humidity (%RH), current (A), voltage (V), power (W), network connection Ethernet/WiFi, ground connection, chassis fan, etc.

Consumption: View the amount of electrical energy that can be calculated as a unit and display usage information of each device and expense summary.

Usage history: Choose to view power usage data or previous device usage data.

- Dev: Built for developers with devices that support API (get & post) and can create a particular rhythm ON/OFF/Restart to the device.
- Ping: Use for creating automatic conditions. To solve the problem of IT equipment freezing or not responding its behavior is to use the ping command in the ICMP protocol. If it is detected that the device is not responding, it can command ON/OFF/Restart or perform other operations on the electrical outlet channels automatically.
- Recloser: Set current, voltage, and power protection values. exceeding or lower than the specified Adjustable type in each electrical outlet channel and the system can connect electricity back automatically according to the conditions set.
- Schedule: A schedule that determines the ON/OFF for each channel or all power outlets at a granular level of seconds. which can be planned for at least 5 years, both choose a date and time and schedule a weekly repeat loop.
- Sense: Users can monitor internal sensors or some external sensors installed for additional use. and can be configured to run ON/OFF with that device.
- Setting:

Device: Used to add/remove Novum devices and sensors to the system and look for many details of the device system. Moreover, you can calibrate voltage, channel ON-Delay time at the start device, DDNS (Dynamic Domain Name System) with the port number configuration when matching in the router for outside remoting to inside device network, and date time setting in RTC (Real Time Clock) for memorizing when shut down.

Ethernet: Setting IP and DNS to the internet.

WiFi: Scan and connect to the WiFi network.

Calibration: setting ON-Delay, Voltage Calibration, etc.

- ON-Delay adjust the delay time for ON for each power outlet. After electricity is restored or the device is turned on, which prevents instability when power is first applied to the device and multiple devices start up simultaneously.

- Voltage Calibration adjusts the values when the voltage displayed on the real-time page is incorrect.

Topology (on Local): Choose the network connection format as connect among each device as a group (Mesh Topology), connect through the controller (Controller Topology), and connect through the cloud (Cloud Topology) of the Novum. For Convenience in expanding or dividing the network in use.

Firmware: For updating firmware software

Permission: Supports assigning access rights to users at each level.

- Log file: The user can go back to history and past event investigation in some intervals.

Hardware Specifications

Hardware	V Model
Input voltage (V)	100-240
Total input current (A)	30
Output per channel (A)	10
Power (W)	6900
Fuse (A)	30
Surge protection	✓
Total power meter	✓
Channel power meter	4
Voltage sensor	✓
LED status	✓
Control ON/OFF/Restart via Ethernet	✓
Control ON/OFF/Restart via WiFi	✓
Ambient operating temp (°C)	-10 - 50
Ambient operating humidity (%)	< 80