inView and PowerScout Installation Manual

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Installation Summary

Provide power to the inGate. Connect this gateway to the network via ethernet or third-party wireless adapter. Install the electricity meter(s) per manufacturer's manual. Install the CTs according to the CT schedule provided by PowerWise. Make sure CTs are on the correct phase and the labels / arrows point to the load. Wire the PowerScout to the inGate. Inform PowerWise support@powerwisesystems.com of the install. PowerWise configures your dashboard and provides username and password access to https://app.intellergy.net.

inView

inView is a hardware and web-based application platform for monitoring and controlling buildings and mechanical systems. Visit https://app.intellergy.net to access the application.

inGate -- a Commercial-Grade Ethernet Gateway

The inGate is a gateway that uses the building's network to send and receive data to and from the cloud. Sensors and meters communicate with the gateway through wired and wireless communications. The inGate supports select Modbus devices.
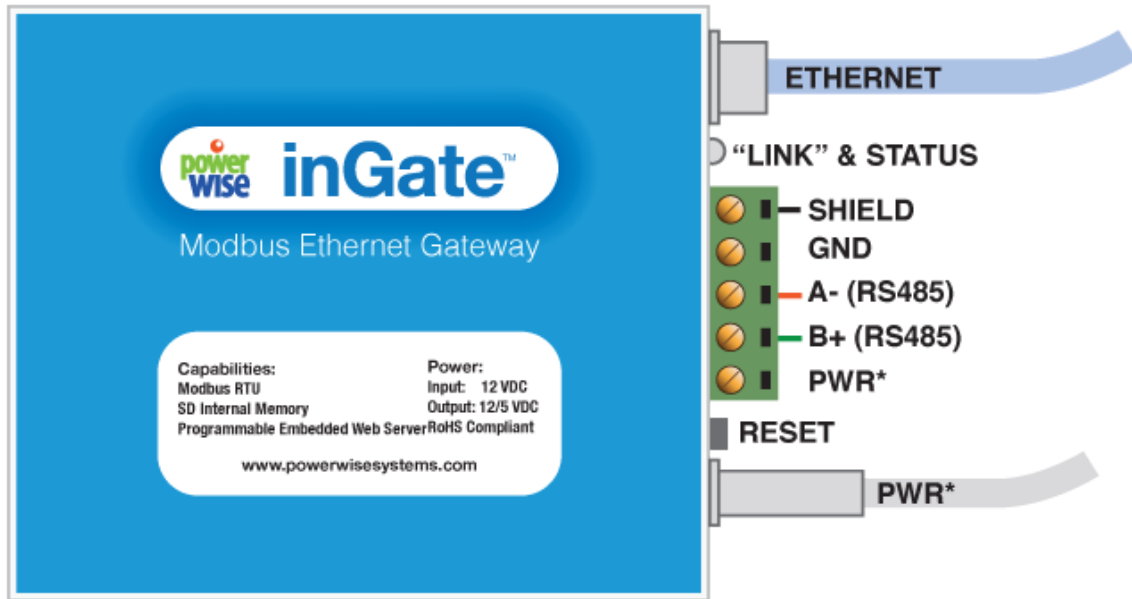
Figure 1. inGate Terminal Connections and Status Lights
*DC power terminals are interconnected. Do not connect to multiple power sources.

Where to Install the Gateway

The inGate needs to connect to the building's network or a cellular modem network via ethernet, plus communicate with the sensors and meters. All of these communications may involve wired and wireless options. The gateway's location depends on network access, power availability, and sensor/meter communications. Typically, the device is installed in the mechanical room. The inGate can be mounted on DIN rail.

PowerWise recommends installers have laptops with network access.

Power

The inGate can be powered by 12-30 VDC. A 12 VDC power supply is provided. In some cases, the inGate may be installed inside an enclosure, and an electrician will need to bring power to the enclosure.

The inGate can provide power to other devices via the PWR terminal.

Network

If the gateway cannot be located where an ethernet connection is available, a third party ethernet to wireless adapter can connect the inGate wirelessly to the building's network. Generally speaking, the adapter needs the network password and power with the correct voltage.

Wired Communications with Sensors and Meters

The inGate has A and B inputs for Modbus devices, which includes the PowerScout electricity meter. Examples of Modbus devices include electricity meters, flow meters, and sensors. The inGate is the Modbus master, and the sensors and meters are slave devices.

Use CAT5 or better with twisted pair when wiring Modbus devices to the inGate. If wiring multiple Modbus devices to the inGate, daisy chain the devices together to provide the best conditions for data communications.

All of the A terminals are connected together and all of the B terminals are connected together. Using CAT5 or better, PowerWise recommends using one twisted pair for A and B.

Network and Communication Status

The inGate has a link and status light to the left of the "Normal" LEDs. The two lights identify network and communication status.

LEDs Indicate inGate Status

Figure 2. inGate Status Lights

inGate and PowerScout Wiring

The PowerScout is an electricity meter that measures energy, power, voltage, current, frequency, and power factor.
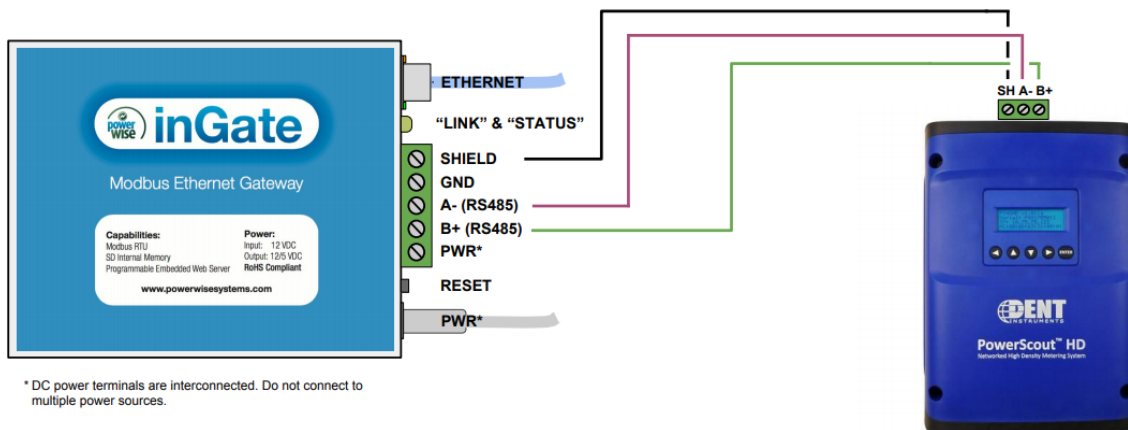

Figure 4. inGate wired to PowerScout 12 / 24 / 48 HD
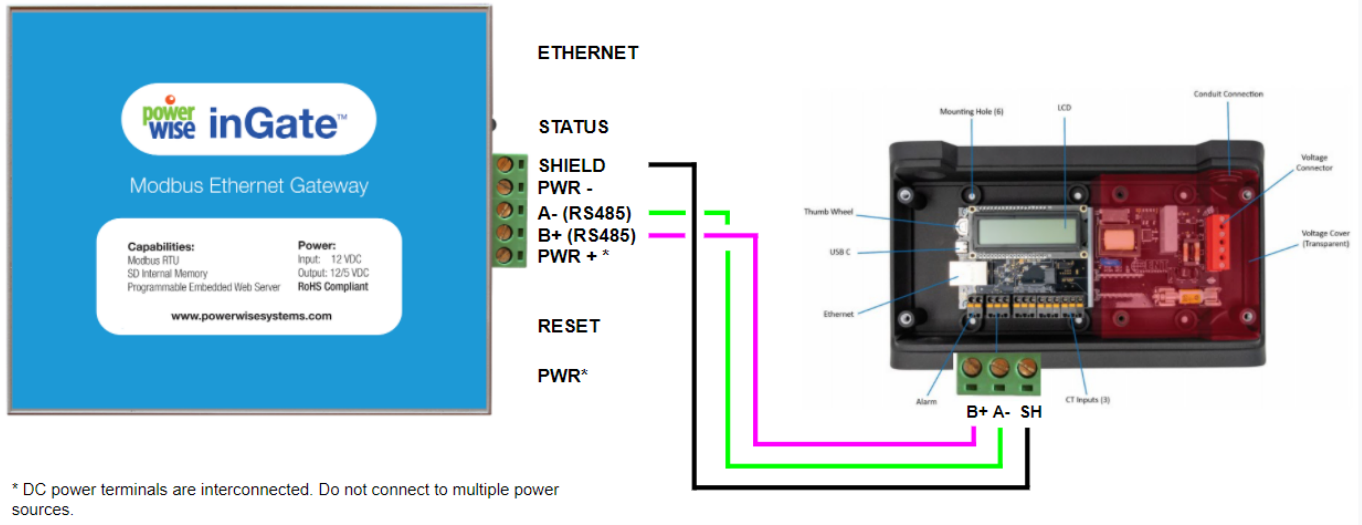
Figure 5. inGate wired to PowerScout 3 HD

Refer to the [PowerScout installation manual](#) for further instructions. PowerWise typically configures the ViewPoint software. Refer to the PowerWise CT schedule for the project or complete the CT schedule and share it with PowerWise.

Registration

Upon completing the hardware installation, confirm the inGate communication status.

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LEDs Indicate inGate Status

Link (green)	Link	Link
Status	Status	Status (red)
Normal	**Bad Comms**	**Internal Error**
Successful communication with servers.	No communication. Check ethernet cable and router	No communication. Check ethernet cable and router

If green, enter the gateway's IP address into a web browser.

To find the gateway's IP address, access your router through a browser. Find the MAC address that matches the label on your gateway, and record the IP address. If you cannot access your router, contact support@powerwisesystems.com or call 1-207-370-6517, and choose Tech Support. We can find the IP address for you.

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When you are viewing the gateway's internal server, click on **Devices** to view or configure Modbus communications. If asked for a username and password, use admin for the username and the last four digits of the MAC address (located on the gateway) for the password. The username and password are case-sensitive.

Click on "Dent HD Power Meter". The device should already be added to the gateway. You will get some information including "tx" and "Err". The tx should be counting up if the device is connected correctly. Otherwise, the Err will be counting up, indicating an error.

User Access

Notify PowerWise support@powerwisesystems.com about the installation. Email the CT schedules and sensor IDs and location information, as well. PowerWise creates usernames and passwords to allow access to the inView application. Login at https://app.intellergy.net.