

VorTek VorCom™ Communication Adapter



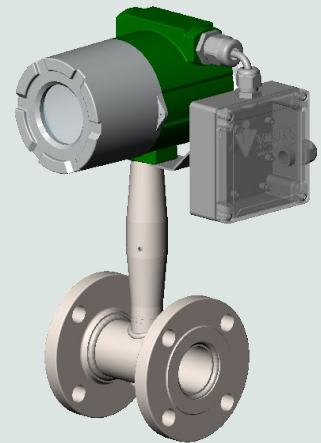
VorTek Instruments' VorCom™ is a field mounted flow module which can be used to convert standard Modbus devices to IP enabled devices in the base model. It can convert the field device to be a fully functional Power over Ethernet capable device. The latter eliminates the need for costly cabling needs.

VorCom™ has been designed to meet the requirements of a wide variety of specialized industries using a single hardware platform thus reducing spare parts requirements, training and calibration costs, and lowers the overall cost of ownership.

When used in conjunction with the standard VorTek flow products, it is a fully integrated pre-configured module with all interconnecting wiring and bracketing included.

VorCom™ Advantage:

- Flexible design with power and communication options to meet site needs
- Creates an IP based communication platform for Modbus RTU platforms
- POE capable interface
- When combined with VorTek flow products, it is wired and ready for power without additional setup needs
- Modbus, BACnet, Power over Ethernet (PoE) communications available
- POE saves time and resources compared to conventional power and communications



VorTek
INSTRUMENTS
VorTek Instruments, LLC

8475 West I-25 Frontage Rd., Suite 300
Longmont, CO 80504 USA
Tel: 303/682-9999 Fax: 303/682-4368
info@vortekinst.com

VorCom™ Principle of Operation

The VorCom™ device is an interface tool to allow users to communicate to a meter or transmitter that only has MODBUS RTU communication via BACnet IP, BACnet MSTP, or MODBUS TCP/IP.

The VorCom™ allows the user to power the meter or transmitter from the VorCom device via a PoE connection. Communication to the meter is also achieved through a 3-wire MODBUS connection. All translation to MODBUS TCP/IP and BACnet is done through the internal MSA Protocessor module.

The product is housed in an IP67 rated enclosure with a lid for viewing of diagnostic LEDs. All cable entry/exit points utilize sealed cable glands.



Specifications

Power Requirements

Power over Ethernet, recommended using POE+ per IEEE 802.3at to deliver up to 20W to the instrument outputs

Output Signals

Modbus RTU, Modbus TCP/IP, BACnet MSTP, BACnet/IP process monitoring

Dimensions

2.25" x 6.0" x 5.0" (L x W x H)

Mounting bracket is dependent on product ordered.



Product Disposal Information

To ensure environmental safety and compliance, please follow these disposal instructions for the product and its components:

Electronic Components:

This product contains electronics that must be recycled through approved e-waste recycling programs. Electronics can contain harmful materials and should be prevented from entering landfills. Do not place electronics in regular trash.

Metal Parts:

Any metal components can be separated and recycled through your local metal recycling facility.

Packaging Materials:

Recycle or reuse packaging materials such as cardboard or plastics, following local recycling guidelines.

For local disposal sites, refer to:

- Call2Recycle (USA, Canada)
- Earth911 (USA, Canada)
- SERI (International)

In the USA, for more information, visit:

- EPA's battery disposal guide
- EPA's electronics recycling page

By following these guidelines, you help reduce waste and support environmental sustainability.



VorCom™ Derating Curve Statement

Power over Ethernet (PoE) technology is commonly used to deliver both data and electrical power over a single Ethernet cable. Two key components in this system are Power Sourcing Equipment (PSE), such as PoE switches, and Powered Devices (PD), which receive power. A standard PoE switch typically provides up to 15.4 watts per port, while a PoE+ switch can supply up to 30 watts by supporting an additional power class. It is important to note that the actual power delivered to the PD can be affected by factors such as cable length and wire gauge, which may cause voltage drops and reduced wattage.

The VorCom™ is optimized for use with PoE+ switches and features a high-efficiency PoE module along with a heat sink plate, allowing it to maintain peak performance even at elevated temperatures. This makes it well-suited for high-demand environments. For performance at specific ambient temperatures, refer to the derating curve provided.

