R9120-3 ModHopper® Wireless Modbus/Pulse Transceiver

DESCRIPTION

The Modhopper® wireless Modbus/pulse transceiver from Obvius provides a self optimizing wireless interface between multiple Modbus devices and networks, perfect for:

- Submetering commercial and industrial facilities
- Adding Modbus devices to any network without the need for costly communications wiring

Modhopper® is a breakthrough mesh technology design that makes wireless connectivity simple and cost effective:

- Connect up to 128 RS 485 Modbus RTU devices to any Modbus RTU network
- Use "Plug and play" connectivity for supported devices to the Obvius AcquiSuite data acquisition server
- Unique "mesh" technology means optimized routing of communications with **NO PC OR SOFTWARE CONFIGURATION!**
- Accepts standard pulse inputs or Modbus
- Pass through device for any Modbus RTU network

Modhopper is the perfect solution for connecting new or existing Modbus and pulse devices (meters, sensors, etc.) without the need for costly wiring runs, core drilling or conduit. Simply connect the Modbus RTU devices to the serial port on the Modhopper and the transceivers will automatically detect the optimum routing to insure reliable and timely data communications. Data from each Modhopper wireless transceiver is passed from one transceiver to another to reach its ultimate destination. This self-managed mesh network means that the system will function with high reliability where other wireless systems fail due to short- or long-term interference with radio signals.

Applications

- Tenant submetering
- Cost allocation
- Adding Modbus devices to existing networks
- Gathering energy information from remote buildings
- Monitoring performance of building systems (e.g., chillers, boilers, fans)

Easy installation saves time and money

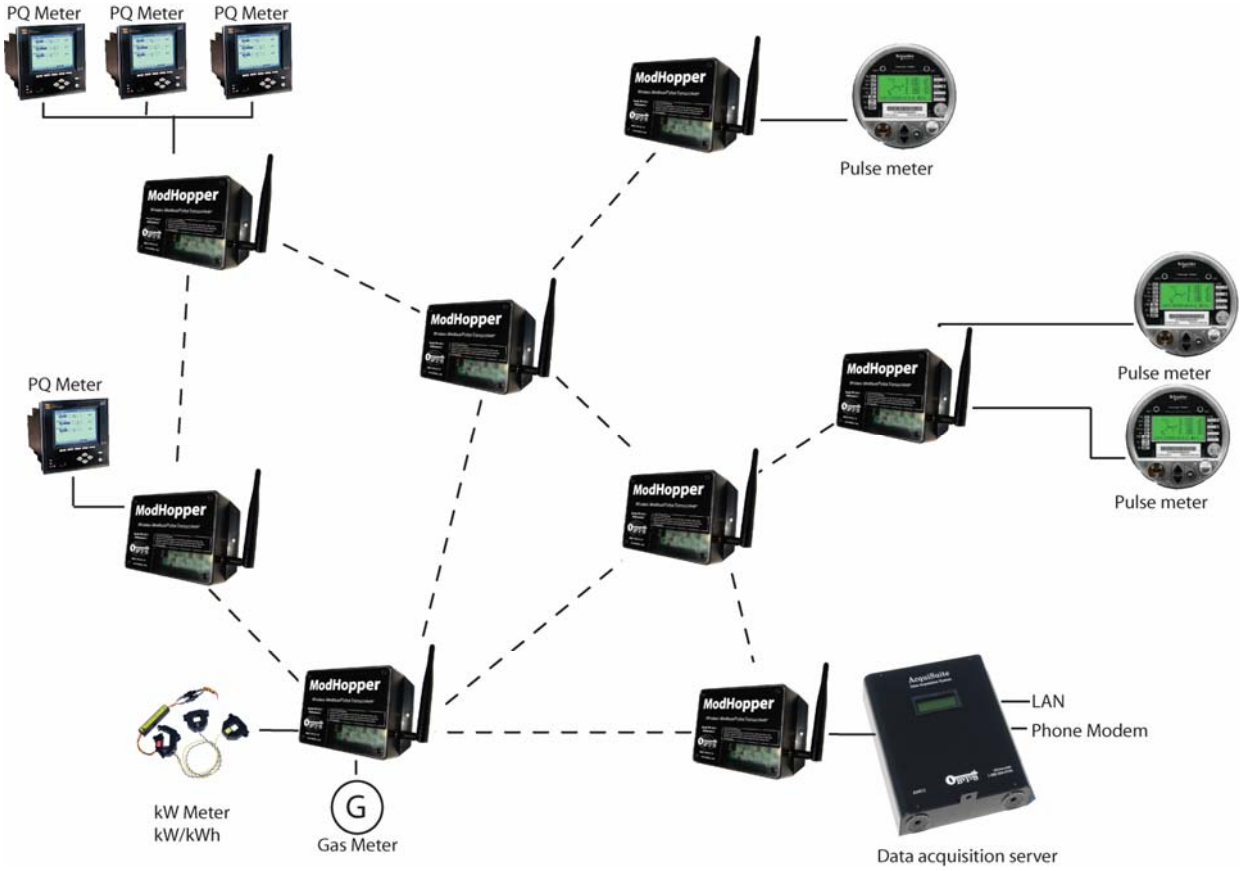
- Self-optimizing hopping technology makes installation easy and cost effective
- Intelligent Modhopper transceivers eliminate the need for costly PC's and software
- Customized design for Modbus RTU device interface provides optimized performance with minimal overhead
- Pulse inputs allow connection to existing meters for electricity, gas, water, steam or BTU's
- Wireless communications up to 1500 ft per hop allows monitoring of remote transformers and meters without expensive trenching
- Rugged wall mount design makes installation a snap and assures high system reliability

Mesh network design makes adding devices simple and inexpensive

- Intelligent Modhopper nodes continuously monitor wireless traffic to optimize routing
- Modhopper nodes and devices can be added at any time and are automatically adding to the routing
- Scalable design means that projects can be completed in stages as resources become available

AcquiSuite, Modhopper and Buildingmanageronline.com (BMO) provide a complete system solution

- The AcquiSuite data acquisition server from Obvius provides plug and play connectivity to meters from most meter manufacturers
- Meters or sensors added to the Modhopper network (or hard wired to the AcquiSuite) are immediately recognized and interval data is stored in the AcquiSuite
- Industry standard protocols provide flexible communications using either existing LAN's or phone lines to BMO or other software
- BMO provides convenient access to stored data using any Web browser from anywhere in the world
- Modhopper provides the flexibility to connect to existing sensors using the A8923 Modbus I/O module
- Standard Modbus RTU protocol design makes connection to any existing Modbus network simple and cost effective



SPECIFICATIONS

Processor	ARM
Firmware	Field upgradeable
Inputs	2x dry contact Modbus RTU
Modbus input	2 wire RS485 (9600 or 19200 baud)
LED	2 x RF, 2 x RS 485, 2 x pulse, Alive, Alarm
Power requirement	110 – 120 VAC or 9-30 VDC
Ordering Information	

Rx120-x – Barrel jack power supply with power supply included
Rx120-xT – Screw terminal, requires 9-30VDC

Model:	R9120-3	R9120-3AU	R9120-5	R24120-3
Max Range (indoor)	1500ft (450m)	1500ft (450m)	3000ft (900m)	300ft (90m)
Max Range (line of sight)	7 Miles (11km)	7 Miles (11km)	14 Miles (22km)	3 Miles (5km)
RF	900MHz, 100mW	900MHz, 100mW Australia/NZ	900MHz, 1000mW	2.4GHz, 50mW
Input Power	9-30VDC, 200mA	9-30VDC, 200mA	9-30VDC, 900mA	9-30VDC, 200mA

COMPATIBILITY

*Modhoppers must be the same model (see above) to ensure compatibility.

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