

R9120-3SN Wireless Sensor Network Interface



DESCRIPTION

Obvius, the leader in cost effective data acquisition, introduces the industry's first plug and play solution for integrating proprietary wireless environmental, analog and pulse sensors into any Modbus RTU network. Combined with the Obvius **AcquiSuite™** and other **ModHoppers™**, the **R9120-3SN** provides a complete wireless data acquisition solution for:

- Gathering data from proprietary remote sensors and meters
- Benchmarking building operations performance
- Logging building data
- Adding sub-metering to existing campuses and base environments where wiring is expensive and time-consuming

The **AcquiSuite™** and **ModHopper™** bring “plug and play” capability to the data acquisition market, dramatically reducing the time and training required to put a wireless data system into any existing facility, campus or base. The **AcquiSuite** data acquisition server allows users to gather interval data from virtually any meter and make the information accessible using any software application or user interface.

By utilizing the integrated 400MHz receiver, users can access up to 64 remote sensors and bring this data back into any data acquisition or building automation system alongside other industry standard meters (Note- 400MHz sensors can only be interpreted by the Acquisuite). As a low cost option for integrating environmental, analog, and pulse sensors; the R9120-3SN is ideal for applications incorporating multi-point temperature or pulse sensors. Simply put the Sensor Network Modhopper in a central location within 300 feet of the remote sensors, and data from the devices will begin logging within minutes.

Applications:

- Campus and base facilities
- Remote pulse meters
- Cost allocation to tenants and third parties
- Bring in Temperature and pulse meter data where power is unavailable
- Ideal for retrofit projects
- Monitoring performance of building systems (e.g., chillers, boilers, fans)

Easy installation saves time and money

- Total wireless solution eliminates costly wiring runs
- Plug and play software makes commissioning fast and easy
- Open Modbus RTU protocol minimizes the time required to make proprietary wireless information available to any BAS or data acquisition system
- 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
- Wall mount design makes installation a snap and assures high system reliability

Gathers data from remote meters:

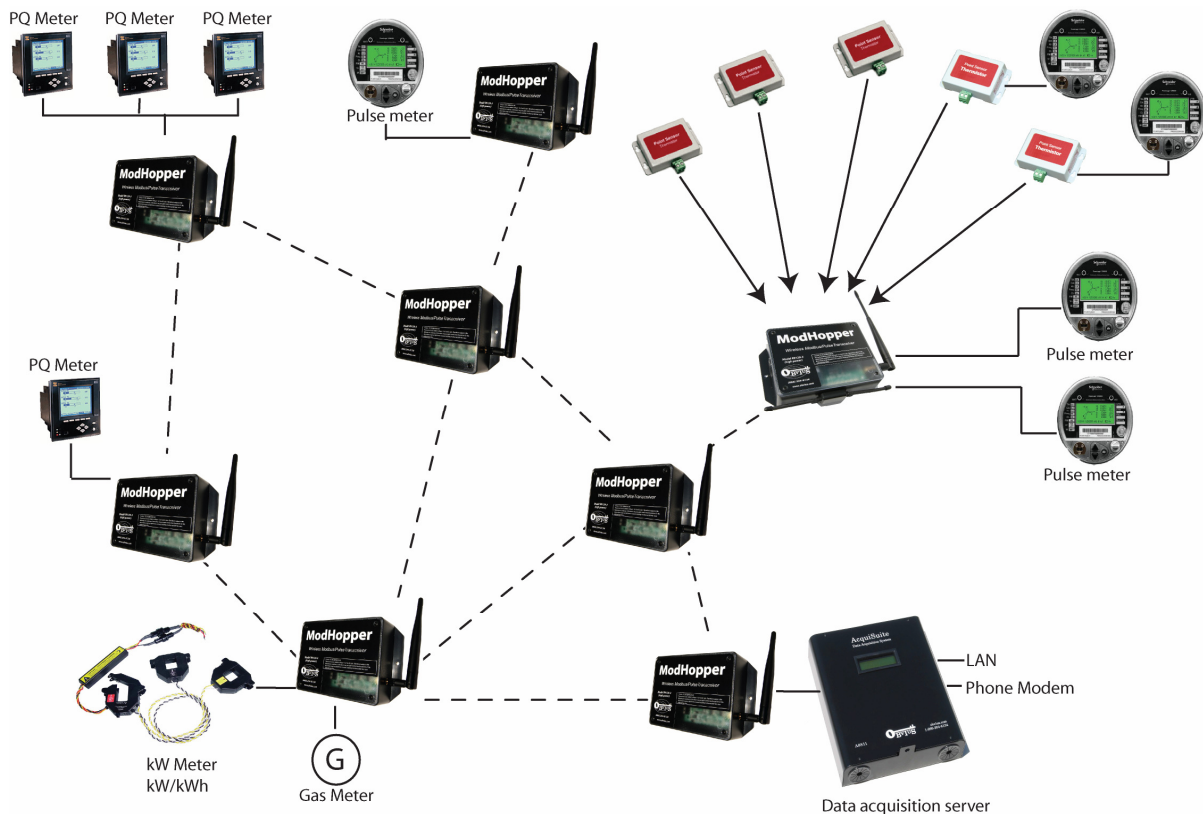
- Incorporate up to 64 remote sensors per Modhopper (consult manufacturer when ordering)
- Remote pulse input module gets data from electrical meters on poles or outdoor locations
- Allows for integration of existing gas, water and steam meters into data acquisition systems
- Monitor meters in pits or other inaccessible locations using submersible transmitter

Easy integration to any EMS or BAS:

- Using **AcquiSuite**, interval data can be sent to a local or remote server using existing LAN, phone line or GSM modem
- XML, HTTP, FTP, SNMP, SMTP protocols make integration easy and quick

Mesh network design makes adding devices simple

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



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 9-32 VDC |
| Ordering Information | |

Rx120-3SN – Barrel jack power supply with power supply included
Rx120-3SNT – 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) |
| 400MHz Range | 300ft (90m) | 300ft (90m) | N/A | 300ft (90m) |
| RF | 900MHz, 100mW | 900MHz, 100mW Australia/NZ | 900MHz, 1000mW | 2.4GHz, 100mW |
| 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.
- *Sensor Network Modhoppers can communicate with any Modhopper using the same radio (R9120-3 compatible with R9120-3SN)

