#### Model 345WT

#### Wireless Modbus/Pulse Transceiver

## Technical Brief

#### **DESCIPTION**

The Model 345WT wireless Modbus/pulse transceiver from Badger Meter 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.

Model 345WT is a breakthrough mesh technology design that makes wireless connectivity simple and cost effective:

- Connect up to 128 RS 485 Modbus devices to any Modbus network.
- Use "plug and play" connectivity for supported devices to the Badger Meter Model 3700 data acquisition server.
- Unique "mesh" technology means optimized routing of communications with <u>NO PC OR SOFTWARE</u> CONFIGURATION!
- · Accepts standard pulse inputs or Modbus.

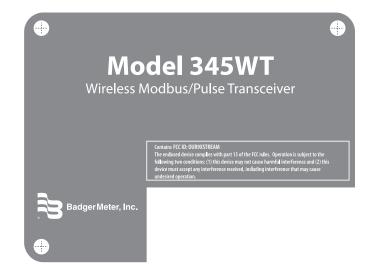
Model 345WT is the perfect solution for connecting new or existing Modbus and pulse devices (meters, sensors, etc.) without the need for costly wiring runs, core drilling or conduit. Simply connect the Modbus devices to the serial port on the Model 345WT and the transceivers will automatically detect the optimum routing to insure reliable and timely data communications. Data from each Model 345WT 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 may 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 (i.e. chillers, boilers, fans).

#### **EASY INSTALLATION SAVESTIME AND MONEY**

- Self-optimizing hopping technology makes installation easy and cost effective.
- Intelligent transceivers eliminate the need for costly PC's and software.
- Customized design for Modbus 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 nodes continuously monitor wireless traffic to optimize routing.
- 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.

# THE MODEL 345WT, MODEL 3700 AND BUILDINGMANAGERONLINE.COM (BMO) PROVIDE A COMPLETE SYSTEM SOLUTION

- The Model 3700 data acquisition server from Badger Meter provides plug and play connectivity to meters from most meter manufacturers.
- Meters or sensors added to the network (or hard wired to the Model 3700) are immediately recognized and interval data is stored in the Model 3700.
- Industry standard protocols provide flexible communications using either existing LAN's or phone lines to BMO or other software. Please contact Badger Meter for more information on BMO.
- BMO provides convenient access to stored data using any Web browser from anywhere in the world.
- The Model 345WT 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**

**ARM** Processor

Field upgradeable Firmware Inputs 2x dry contact

Modbus RS 485

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

Radio

900 Mhz ISM Frequency Output power 100 mW Max range 1500 ft. per hop



Please see our website at www.dataindustrial.com for specific contacts.

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Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists.



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