

The 6424 Meshscape® Wireless Pulse Counter, (Wi-Pulse) Accumulates Meter-Output Pulses And Communicates As A Node In A Self-Forming And Self-Healing Wireless Network.

### Features At a Glance

- MeshScape® compatible wireless sensor node
- Operates on worldwide license-free 2.4 GHz ISM radio band, with 16 user selectable channels
- Available in two configurations:
  1. Battery powered End Node:
    - Complete wireless operation
    - Low-power consumption for extended use
  2. Line Powered Mesh Node
- Pulse rates of up to 10 pulses per second
- Detects pulses of 10 msec. or greater
- 32-bit accumulator
- Two RJ11 connectors support up to two pulse outputs
- Additional IO interfacing is possible
- CE and FCC compliant hardware module
- RoHs compliant
- Indoor/Outdoor enclosure, easy to mount

### Wireless Pulse Counter

The 6424 MeshScape® Wi-Pulse functions as pulse accumulator (counter) for pulse rates of up to 10 pulses per second. Counts are communicated wirelessly through the mesh network at configurable frequencies with bidirectional acknowledgement. The Wi-Pulse accumulates up to 4 bytes of time-stamped pulse counts.

### Ease of Installation

The Wi-Pulse can be installed in minutes at the local meter. There is no need to run network wires. The Wi-Pulse is designed for low power consumption, to enable battery-powered operation with configurable duty cycling for optimum battery life. It serves as a MeshScape 6424 End Node in a star or star-mesh topology, or as a Mesh Node. RJ11 connectors also ease installation.

### Typical Applications

The Wi-Pulse is ideal for retrofit, new installations or temporary consumption studies, for such purposes as water, electricity or gas metering in municipal, commercial, residential and industrial environments. With optional I/O's, users can monitor related measurements, such as water temperature or gas pressure.

### Long Range

Wi-Pulse is available with two radio power choices: 10-mW and 18-mW (allowed by North American regulations). Higher power provides greater transmission distance up to 750 feet, clear line of sight. Indoor/Outdoor enclosure, easy to mount.

#### Try it for yourself

Setting up a wireless mesh network is fast and easy. The MeshScape™ self-forming and self-healing network is designed for rapid deployment and ease of operation.

For more information, visit [www.millennialnet.com](http://www.millennialnet.com)

### MeshScape® 4 Networking

The Wi-Pulse uses industrially-proven MeshScape 4 networking software. MeshScape 4 uses patented Persistent Dynamic Routing™ (PDR) techniques to form a self-configuring, wireless mesh network. PDR uses a node-initiated network formation for efficient topology discovery, and uses "best route" information for network re-formation (required in ever-changing RF environments). With MeshScape, you can deploy industrial-class wireless mesh networks that are:

- **Self-administrating:** a self-forming and self-healing mesh network that requires no administration
- **Robust:** a network that ensures reliable data transmission
- **Responsive:** a network that quickly adapts itself to changes in topology or radio frequency (RF) environments
- **Power efficient:** can run for years on a single battery set
- **Scalable:** can scale with the application to hundreds of wireless nodes with minimal overhead y
- **Low latency:** with very short network data delivery times

The Wi-Pulse is designed to be part of the MeshScape 4 LAN-based system, which can be configured to provide either single-site monitoring/control via a local PC, or multi-site monitoring/control via an internet web interface.



The Wi-Pulse supports two pulse outputs with RJ11 connectors for easy installation. Additional IO interfacing is also possible.

### Remote Monitoring/Control Software Features

The MeshScape Wi-Pulse is designed to interface with any ModBus® or MeshScape compatible Remote Monitoring and Control software application. For example, Millennial Net's Wi-EMS is a full-featured, easy-to-use Wireless Energy Management System. Wi-EMS provides all the tools you need for reporting, historical trending and in-depth energy analysis.