

## **VEmesh for Landis+Gyr EM5100 meter**



Based on Diversity Path Mesh™ technology, VEmesh™ for Landis+Gyr EM5100 Meter is a product that enables the use of these flexible meters in a cost effective, highly reliable bi-directional wireless mesh configuration.

In Virtual Extension's Diversity Path Mesh networks, all network nodes are synchronized and act as relays and retransmit the data from other nodes, instead of dedicated nodes for each route. This novel technique, known as flooding, has a distinct advantage over the traditional routing technique by eliminating the management layer in the network, thus creating a system that is transparent to the application, with very few network parameters to be set; no management or supporting software has to be developed. In addition, the system has no set-up procedure, and therefore adding, replacing, or removing nodes does not require downtime.

The RF performance of the system is also outstanding because each packet of data propagates in all available paths, resulting in a very robust and reliable system. Hundreds of relaying steps (hops) are possible, creating a modular solution with a practically unlimited number of nodes and coverage area.

Virtual Extension customized the VEmesh PCB and interface for a perfect matching to the specific meter physical and electrical specifications of Landis+Gyr EM5100 Meters.



### Features & Benefits

- Enables to add wireless connection option to regular meters
- Same meters can be used both in fixed and drive-by configurations
- Network deployment and maintenance by untrained personnel
- High range - maximum mesh network range in class, both open space and densely built area
- Minimum dead spots
- Highest known communication reliability in RF interference and propagation change conditions
- Minimum overall latency, for fast reading of meters
- Built-in broadcasting and multicasting

### Main Specifications

- RF Data
  - Frequency Band: Unlicensed, 902-928 MHz (US), 863-870 MHz (Europe)
  - Adaptable to other regions
  - Channel spacing: 256 KHz
  - FHSS: 51 frequencies minimum
- Output Power
  - +30 dBm
- Antenna
  - Internal

July 2009

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