

Multi-Vendor Support On A Single Wireless Node

EkaNet Water Nodes are battery powered endpoints for encoder-based and pulse-generating water meters. Water Nodes wirelessly link to a nearby EkaNet Electric Meter Node that is part of a fixed EkaNet AMI network. Once connected to an Electric Meter Node, a Water Node extends two-way communications to the water meter, incorporating water applications into the overall EkaNet AMI solution.

Flexible in their user-programmable capabilities, EKA-1600 Nodes allow utilities to configure and modify a water meter's read and report intervals during installation and any time thereafter. Alarms and leak detection flags are also read from encoders and transmitted. Supporting both residential and C&I applications, EkaNet Water Nodes are suitable for new deployments as well as retrofits.

Key Features

- Meter reading and usage data reporting at a user-programmed interval
- 45 days of hourly data storage
- No data is lost or reconfiguration needed in case of power loss
- Sealed enclosure with a 10 year battery life for pit installation
- Remote software download capability
- Alarms for battery low and tampering

Key Benefits

- Increased speed of meter readings—no routes
- Remotely configurable reads, reports and alarms
- No removing meter lids or pumping pits to read
- Increased accuracy and safer meter readings
- Compatible with a wide range of encoder-based and pulse generating meters
- Manage your utility, not your network

Specifications

Network

- EkaNet: A self-forming, self-configuring, self-healing wireless mesh network
- Reliable communication using redundant paths
- No network address management required
- Automatic network acquisition, traffic management, time synchronization
- Highly secure authentication, key generation and AES encryption
- Automatic time synchronization

Application

Compatibility	Compatible with a wide range of encoder-based and pulse generating meters
Read intervals	30 minutes, 1, 2, 3, 4, 6, 8, 12 and 24 hours
Report intervals	1, 2, 3, 4, 6, 8, 12 and 24 hours
Data storage	45 days of data storage
Data integrity	Non-volatile data storage

Radio

Operating frequency	902–928 MHz
Reliable data transmission	Error detection, correction and retransmission
RF output power (max)	15 dBm
Data rate	76.8 kbps
Receiver sensitivity	-93 dBm (@ 0.1%BER, +25°C)
Range (w/ omni antenna)	Up to 750 ft (230 m)
Mode	Frequency Hopping Spread Spectrum

Interface

- External module, multi-wire connection

Compliance

- FCC

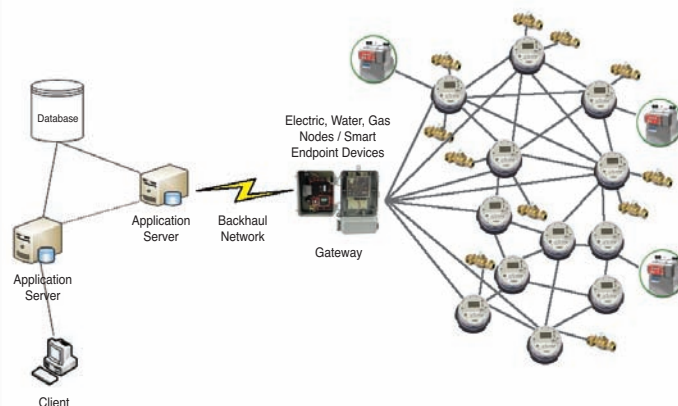
Physical Properties

Mechanical

Weight	16oz (454g)
Dimensions	5.5 x 3.5 x 2in (14 x 9 x 5cm)
Enclosure	IP68

Operating Conditions

Temperature range	-40°F to +185°F (-40°C to +85°C)
Humidity	5–95% non-condensing
Power supply	DC 3.6V "D" cell lithium chloride battery Internally mounted



About Eka

Eka Systems is a global manufacturer and supplier of Smart Networks that enable utilities to develop the highly scalable, efficient and flexible energy management infrastructure necessary to establish AMI and the Smart Grid.

For more information about our services and this offering, please contact us at 1-877-eka-knows or visit www.ekasystems.com.