



One Node Covers Residential Meters From Elster American

The **EKA-1400-11** is a direct mount, battery powered endpoint for new and legacy residential gas meters from Elster American and Elster Canadian. As an extension of the EkaNet mesh network established on electricity meters, 1400 Series Nodes allow highly secure, two-way communications with gas meters, incorporating gas applications into Eka's AMI solution. Configuration of meter read and report intervals, and alarm thresholds, is available during deployment or remotely. The EKA-1400-11 is ideal for new deployments or retrofits.

Key Features

- Highly secure authentication, key generation and encryption with all Nodes
- Operates in the 902–928 MHz license-free band
- Automatic network acquisition
- Automatic time synchronization
- Remotely configurable reads, reports and alarms
- Stores over 45 days of interval data readings
- Direct-mount, sealed enclosure for long life outdoors
- Field replaceable battery with 10-year guaranteed life
- Easy field retrofits
- Tested for Intrinsic Safety

Key Benefits

- Continuous reads—no routes
- Smarter information, operations and customer service
- Manage your utility, not your network



Specifications

Network

- EkaNet: A self-forming, self-configuring, self-healing wireless mesh network
- Full peer-to-peer communication
- Multiple, redundant paths
- No network address management required
- Automatic network acquisition
- Automatic traffic management
- Two-way authentication, one-time session keys, and AES encryption
- Automatic time synchronization

Application

Compatibility	Fits Elster, American and Canadian meters: AL-175, 225, 250, 310, 350, 425 AC-175, 250, 630 AT-175, 210, 250, 350 ALC-175, AR-250, AM-250
Read intervals	30 minutes, 1, 2, 4, 6, 8 and 24 hours
Report intervals	1, 2, 3, 4, 6, 8, 12 and 24 hours
Data storage	45 days of hourly interval reads and 512 events/alarms
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)	
Outdoor	> 750 ft (228 m)
Indoor	60–125 ft (18-38 m)
Mode	Frequency Hopping Spread Spectrum

Interface

- Direct-mount enclosure, utilizing gear or dog drive

Compliance

- FCC
- UL-1604 compliant

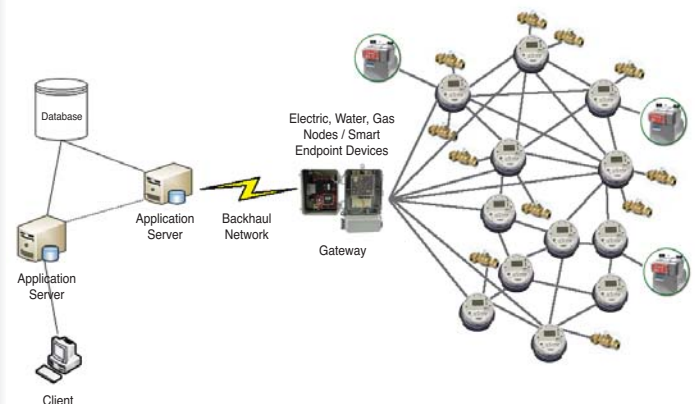
Physical Properties

Mechanical

Weight	1lb 9oz (0.71kg)
Dimensions (w/ battery)	6.25 x 3.50 x 1.9in (15.9 x 8.9 x 4.8cm)

Operating Conditions

Temperature	-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 in ultrasonically welded case



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.

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