

## Reliable Solid State Metering With Reliable Networking

Eka Systems' **EKA-1100-41** electric meter Node is an advanced AMI networking solution for the Landis + Gyr FOCUS AL solid state electric meter. Not every meter deployed will be an advanced meter, and the FOCUS AL provides electric utilities with a reliable, quality, low-cost, solid-state kWh meter platform integrated into a Smart Network from Eka. With Node interval data available on all channels the meter is capable of measuring, utilities gain a very capable meter for the price.

### Key Features

- Highly secure authentication, key generation and encryption
- Operates in the 902–928 MHz license-free band
- Automatic network acquisition
- Automatic time synchronization
- Non-volatile data storage
- 4 interval data channels
- 25 daily data channels
- On-demand reads

### Key Benefits

- Meter reads and control, whenever you want it
- 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 bit AES encryption
- Automatic time synchronization

### Application

Compatibility	Supports all FOCUS AL forms: 1S, 2S, 2SE, 3S, 4S 12S, 25S All voltages, all classes
Data storage	128K, stores 1 month of data
Data integrity	Non-volatile data storage provides extra security in the even of communication or power outage

### Radio

Operating frequency	902–928 MHz
Reliable data transmission	Error detection, correction and retransmission
RF output power (max)	20 dBm
Data rate	76.8 kbps
Receiver sensitivity	-109 dBm (@0.1%BER, +25°C)
Range (w/ omni antenna)	
Outdoor .....	> 4500 ft (1500 m)
Indoor .....	375–750 ft (125-250 m)
Mode	Frequency Hopping Spread Spectrum

### Interface

- FOCUS AL option board interface header
- Header utilizes RS-232 @ 9600 bps using C12.18
- Under-the-glass

### Compliance

- ANSI C12.1, C12.10, C12.18, C12.19, C12.20
- FCC

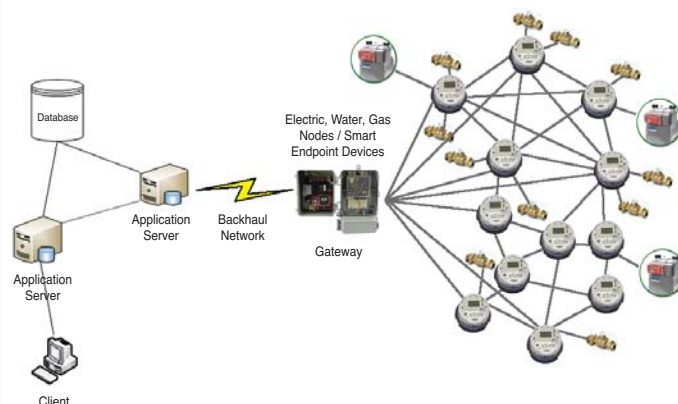
## Physical Properties

### Mechanical

Weight	2.5oz (71g)
Dimensions	5.00 x 2.50 x 1.25in (12.7 x 6.4 x 3.2cm)

### Operating Conditions

Temperature range	-40°F to +185°F (-40°C to +85°C)
Humidity range	5–95% non-condensing
Power supply	110–240V AC from meter supplied spade lugs
Power burden	< 0.8 W average Voltage: 5V



## 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](http://www.ekasystems.com).

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