

Data On Demand™

Smart Grid functionality specifically designed for small to moderate installations



Data On Demand

At last a smart grid solution is available for small to moderately sized installations. Advanced Metering Infrastructure (AMI) solutions are cost prohibitive for many applications due to large infrastructure and software costs. Vision Metering's Data On Demand offers Smart Grid functionality at a fraction of the costs normally associated with AMI solutions. Data On Demand is optimized for use in localized areas with densely populated metering needs such as apartments, college campuses, military housing, medical complexes, industrial parks and municipalities.

Vision Metering's Data On Demand system provides real time energy consumption values using a robust 900MHz RF star network. Each endpoint is metered using a Vision meter equipped with Data On Demand radio and communicates directly with a RadioGate. The RadioGate collects the data and delivers it to the EndSight™ data collection system on the end-user's network. The

RadioGate is connected to the end-user's network via TCP server, TCP

client or UDP (Universal Data Point) client with either static or dynamic IP addresses. Cellular backhaul can also be accomplished using a standard cellular router.

Meters can be configured to transmit data as frequently as every 15 seconds to a RadioGate. Each RadioGate collects and transmits data for every meter as often as one-minute intervals. Standard energy data including kWh, Voltage, Current, Phase angle and kVA is contained within every message. Signal strength is also reported by the RadioGate for every meter for ease of monitoring and troubleshooting.

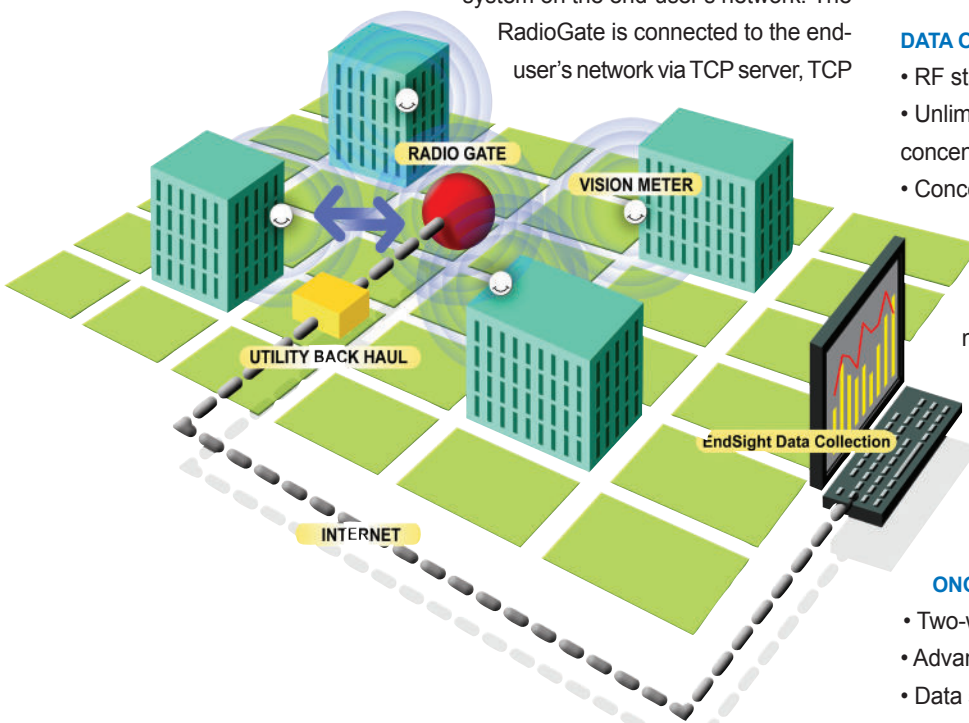
Every RadioGate also has the capability of repeating data received from other RadioGates in order to provide a more robust network. This also reduces the number of RadioGates that require a backhaul method to get the data to the EndSight data collection system.

DATA ON DEMAND FEATURES INCLUDE:

- RF star network
- Unlimited meters can be assigned to a single concentrator
- Concentrator deployment based solely upon RF transmission/reception
 - RF range: up to 1,000 yards, line of sight
- Data transmission options include: kWh, max. kw, instantaneous kw, voltage, current and phase angle for all three phases
- Transmission schedule: 1 to 60 minutes, programmable
- Networking: TCP server, TCP client, UDP client, Static or Dynamic IP addressable

ONGOING ENHANCEMENTS:

- Two-way communication
- Advanced utility grade security
- Data storage onboard collectors
- Optional 400MHz RF band



Product Specifications

Available Forms:

- 1S**, 120V, Class 100
- 2S**, 240V or 480V, Class 200 or Class 320
- 3S**, 240V, Class 20
- 4S**, 240V, Class 20
- 5S**, 120V/480V, Class 20
- 6S/36S**, 120-480V, Class 20
- 12S**, 120/208V, Class 200
- 8S/9S**, 120-480V, Class 20
- 14S/15S/16S**, 120-480V, Class 200 or Class 320

Applicable Standards (meets or exceeds)

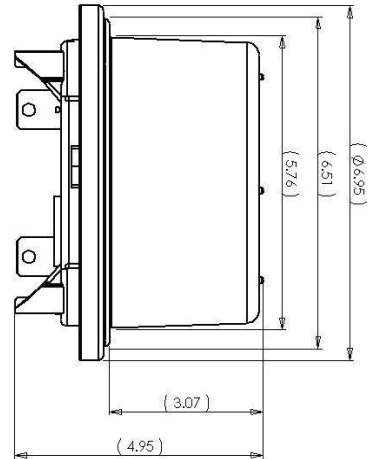
- ANSI C12.1-2001 for electricity metering
- ANSI C12.10-1987 for watt-hour meters
- ANSI C12.20 1998 for solid state-electricity meters
- ANSI C37.90.1-1989
- ANSI C12.18
- ANSI C12.19



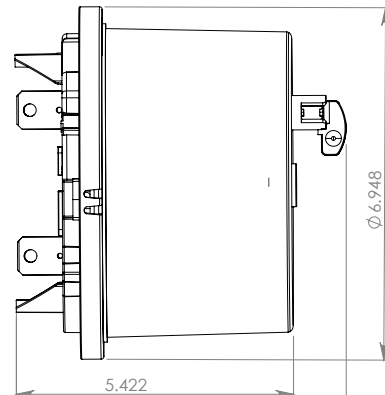
RadioGate Collector

Meter capacity: Unlimited
 Range: Up to 1,000 yards
 Output formats: MVRS, ModBus/TCP

Singlephase



Polyphase



Standard Features:

- Outputs: Ethernet, Mini USB
- Repeater function
- Onboard Memory
- Pulse Inputs: Two form A
- Pulse Outputs: Two Form A

Optional Features

- Cellular Modem
- External antenna
- Expanded Memory
- RS-232
- Modbus RTU