

The innov8-VN is a cellular water meter register which mounts with all Metron water meters. The innov8-VN enables the most advanced meter data and analytics in the industry. The register can also be adapted to many other traditional water meters providing instant AMI upgrades to deployed meters. The register senses the meter magnetic down to ¼ turns and stores data in 1 minute or 5-minute intervals. The innov8-VN register utilizes the Verizon Wireless™ network to securely and reliably deliver readings, high resolution interval data and diagnostic data to the cloud-based meter data management system (MDMS). Utilities and consumers can access data via the powerful Waterscope® web portal and via email notifications.



SPECIFICATIONS

Operational

Cellular Channel

Carrier: Verizon Wireless

Method: LTE Cat-M

FCC/IC: License exempt

Secondary: Proprietary InfraRed port

Onboard Storage: 5 min intervals: 227 days
1 min intervals: 45 days

LCD: 8 digits
Display: Duplicates meter/register
Configurable digit underlines
Units: G, Ft3 or m3

Battery: One (1) 19Ahr non-replaceable
Type: Lithium Thiomy Chloride
Lifetime: 10 years nominal

Physical

Dimensions 3.6W x 3.6H x 2.5D inches
w/o antenna 91W x 91W x 63.5D mm

Weight: 0.70 lb (0.31 kg)

Temperature Storage -20° to 140° F (-6° to 60° C)
Operation -0° to 140° F (-18° to 60° C)

Humidity: 0 to 100% RH condensing
Fully submersible (IP-68)

DESIGN

Construction: The innov8-VN register is a compact, fully encapsulated package for all environments.

Meter Attachment: A standard plastic meter housing provides a robust and tamper-resistant attachment to all Metron water meters. Metron can also provide attachment housings for many other meter types.

Outputs: The innov8-VN register can be supplied with a 3-wire standard AMR output. The output cable can be ordered in different lengths and with Itron or Nicor waterproof connectors.

Antennas: The innov8-VN Register has an antenna port which can accommodate either a local antenna or a remote antenna for extension through walls or outside pits/vaults.

Activation: All innov8-VN units come from the factory activated and provisioned on the Verizon Wireless network. Consumption data on the Waterscope web portal can be accessed within 24 hours of installation.

Operation: The innov8-VN Register has an internal sensor which tracks the meter's measuring element and stores consumption every log interval. The unit will also perform on-board measurement diagnostics regularly. Once per day during super off-peak hours (1 to 6am local time), the unit will negotiate a secure channel with the Verizon Wireless tower and transmit a daily packet with the current meter read, the daily interval logs and other diagnostic data. Following the transmission, the unit waits for any commands from the cloud server (such as configuration or data backfill) prior to returning to normal operational mode.

FUNCTIONALITY

Configuration: Configuration can be performed via the local InfraRed (IR) port with Metron’s IR bridge. The IR bridge can be coupled via USB to a Win10 computer with the Communicator software or be operated in a standalone mode.

Configuration Options

- Index Ratio (meter calibration)
- LCD Configuration
- Measurement units
- Log Interval
- 3-wire output digits

Datalog capacity: 227 days with 5-min intervals
45 days with 1-min intervals

Data resolution: per Index Ratio
Data intervals: Five (5) min (default)
or One (1) min

Data Backfill: Automatic from MDMS

OTA Updates: Available
Onboard Time: Synced with Verizon
Security: VPN and encryption
Contact Metron for info

Flags/Alerts

- Consumption
 - Leak / Threshold Leak / Intermittent Leak
 - High Usage / Zero Usage
 - Backflow
 - Unexpected / Unauthorized Usage
 - High/Low Temp
 - Watering Event

Diagnostic

- Low Signal Strength

DISCLAIMERS

Transportation: The innov8-VN Register contains a lithium battery and thus is prohibited from shipment by AIR. Please conform with all shipping regulations for lithium batteries.

Safety: The innov8-VN operates with radio frequency (RF) during its cellular communications. Metron can provide a whitepaper covering the potential health effects of smart meters.

Disposal: The battery inside the innov8-VN is not replaceable and removal should never be attempted. The innov8-VN units should be disposed of in accordance with local regulations.

COMPATIBILITY

The innov8-VN is compatible with a wide range of industry registers and electronic meters.

Metron-Farnier:	Spectrum residential meters Altair residential meters Spectrum commercial meters Enduro industrial meters Enduro fire service meters Challenger turbine meters Voyager hydrant meters
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Metron has tested meters from other meter manufacturers and offers compatibility with many meters with magnetic measuring elements. The following shows a sample of the types of meters. Consult with your Metron representative for questions on compatibility or testing.

Badger:	PD meters Turbine meters
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Sensus:	PD meters Turbine meters
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Neptune:	PD meters Turbine meters
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Mueller:	PD meters Turbine meters
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Master Meter:	PD meters
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Elster:	PD meters
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Zenner:	PD meters
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RG3:	PD meters
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Hendey:	PD meters
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WARRANTY

Please contact your Metron representative for formal warranty certifications.

LEGAL

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