



# Solar Meter

As consumers become more environmentally aware of their energy consumption and carbon footprint, the interest in and use of solar power is on the rise. Itron's revenue-grade Solar Meter is ideal for monitoring the production of residential and commercial solar photovoltaic (PV) systems and can support bidirectional and net metering. The meter collects, stores and uploads the PV system's production data to the solar solution provider over an existing 4G LTE cellular network link that is fast, reliable and secure.

Itron's cellular meter adheres, at minimum, to the stringent ANSI C12.20 5.5.2.5 accuracy class CA 0.5 standards — measuring inverter production with up to 99.5% accuracy, regardless of inverter or panel type. Simply put, Itron's Solar Meters are the most accurate and reliable meters available — and are already trusted by leading electrical utilities around the U.S. And because our meters can be installed in a simple “plug and play” fashion with utility-standard installation techniques, installation and activation is streamlined — meters can report production data to the solar provider in as little as 45 minutes.

## **BENEFITS OF CELLULAR SOLAR MONITORING**

In addition to quick and easy installation, Itron Solar Meters are significantly less expensive than other available monitoring

systems. Using our technology, you can benefit from:

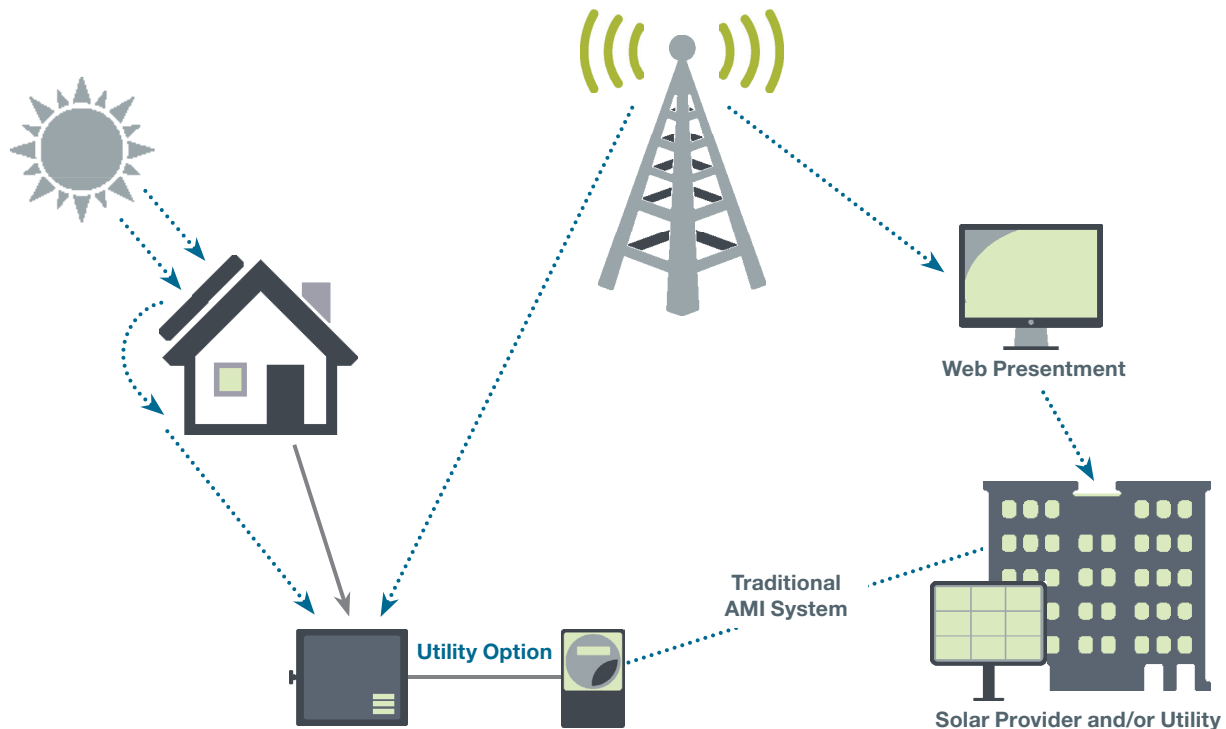
- » Supports bidirectional and net metering
- » Revenue-grade meter accuracy
- » ANSI certification and the highest level of security available (meets federal security standards)
- » Unparalleled reliability and proven architecture deployed by leading utilities
- » Low-cost, one-piece installation that requires significantly less labor
- » Standard meter connections — no custom parts or wiring
- » Certified with network carrier for the highest possible reliability and fast data transfer with immediate accessibility
- » Remote disconnect switch option helps with non-payment issues and doesn't require entrance into the house or property

- » Immediate notification of production issues through alarms
- » Over-the-air upgrades to ensure your meters have the latest features and functionality, no on-site visits required

## **Simple and Reliable**

Itron Solar Meters can monitor any type of solar energy system production with 99.5%\* accuracy regardless of inverter or panel type. Information can be stored for up to 90 days.

Production data is stored on the meter and uploaded automatically over the cellular network to the collection system. Solar providers retrieve production data via an industry-standard format or secure XML file transfer from the collection system.



## How it Works Smart Meter communication over cellular networks

### Installation

A Solar Meter plugs into a number of energy industry-standard ANSI plug-in bases. For most residential installations of 200 amps or less, a widely available standard Form 2S is used. In North America, the meter is designed for a 240 Volt, 60 Hz system.

Installing the Solar Meter in-line with the service panel feed allows the solar provider to utilize the meter's remote disconnect capabilities when required.

Every Solar Meter is enabled to accept over-the-air firmware and configuration upgrades, ensuring the meter always has the latest updates.

### Data Collection

All Itron Solar Meters collect interval data (at intervals typically between 15 minutes

and 1 hour) as defined by the solar provider. Production data can be stored in the meter for up to 90 days. The Solar Meter module provides the solar provider with a vast quantity of meter alarms that provide information about the installation.

### Network Connectivity

Itron Solar Meters are truly "plug and play" devices that use a cellular connection for data transfer. Using a Solar Meter, the installer has flexibility to select either AT&T, Verizon or Rogers (available for Canada) as the commercial network of choice to ensure the highest quality network connection available. Our meters use 4G LTE connectivity for high-speed, secure and reliable communications.

If required for areas of low cellular connectivity, Itron also offers a solar meter on polyphase meter forms. On

these polyphase forms, an external antenna can be used to strengthen the cellular signal and ensure connectivity.

### Cloud and Hosting Services

Itron offers a hosted server so that solar providers don't have to worry about adding "yet another system" to manage and operate with in-house staff. With our cloud and hosting services, production data is collected and provided via web services or XML files to the solar providers' in-house systems or web-portal systems.

### SPECIFICATIONS

Meter compatibility and specifications available upon request.

\*All OpenWay CENTRON meters meet ANSI 12.20 for accuracy class 0.5% (Singlephase) and 0.2% (Polyphase). Customers can opt for an Optional Singlephase Adder for 0.2% Accuracy Class.



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