GW4 Gateway

NextCentury 5G Cellular Gateway

Operation and Installation Guide



1| Product Overview

The NextCentury 5G Cellular Gateway introduces the next generation of superior wireless utility management. It includes simple plug-n-play setup and can facilitate the communication of thousands of wireless devices on a single property.

This cloud-connected Gateway is easily and securely connected to the internet using ethernet, WiFi, or built-in 5G cellular.

Models

- GW4 – Up to 10,000 units
- GW4-Lite – Up to 50 units

NextCentury Connect™ Technology

Secure and reliable wireless communication is made possible with **NextCentury Connect™**. This wireless technology has been developed to ensure excellent signal integrity in even the most challenging wireless environments.

Long-distance 900MHz radios and smart frequency hopping minimize interference, while a bi-direction encryption engine keeps data private and secure.

A Superior Cloud Platform

Property setup, configuration, and usage data are managed on the **NextCentury Cloud**. This robust management solution connects you to a wide range of features for simple property setup and ongoing operation.

Seamless & Reliable Operation

Utility usage and alert data from your NextCentury devices are securely stored on the GW4 Gateway and automatically kept in sync with the Cloud Platform.

Integrated solid-state memory ensures the GW4 will continue to save usage and alerting data even during an interruption to the internet connection. Connection loss alerting ensures such issues are resolved quickly.

2| Technical Specifications

2.1 – Certifications

FCC ID:	2AB8I-GW4	IC: 20949-GW4
Contains FCC ID:	RI7WE866C6	IC: 6131A-WE866C6
Contains FCC ID:	N7NHL78	IC: 2417C-HL78

2.2 – Product Models

- GW4 – Supports properties up to 10k units
- GW4-Lite – For properties with 50 or fewer units

2.3 – Wireless Communication

- Two-way NextCentury RF Connect™
- 902-928 MHz Unlicensed Band

2.4 – Cellular Data Communication Option

- 5G & 4G/LTE
- Simple no-contract subscription

2.5 – LAN Data Communication Options

- Gigabit Ethernet
- WiFi (2.4GHz A/B/G/N)

2.6 – In-Field Configuration

- Advanced configuration options available using the NCSS Mobile App (iOS & Android)

2.7 – Dimensions

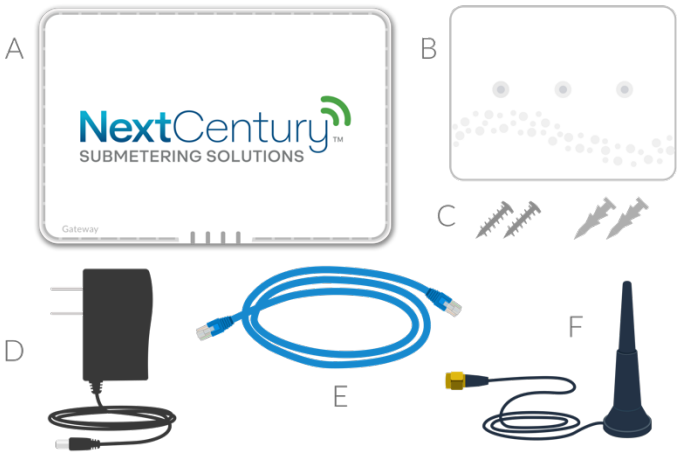
- 5.1in x 1.2in x 7.7in (129mm x 31mm x 195mm)

2.8 – Operation Environment:

- -20°C to 60°C (-4°F to 140°F)
- Should be installed in an indoor, dry environment

NextCentury™
SUBMETERING SOLUTIONS

3| Package Contents

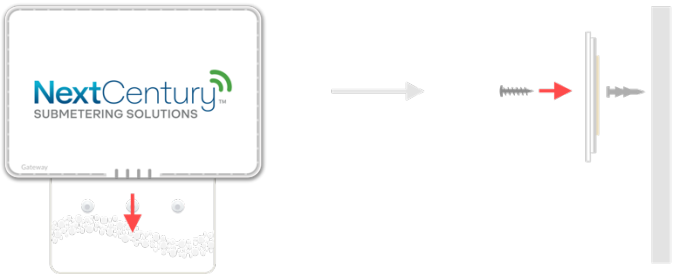


A) GW4 Gateway
B) Mounting Plate
C) Mounting Hardware
D) 15v Power Supply
E) Ethernet Cable
F) 5G Antenna

4| In-Field Installation

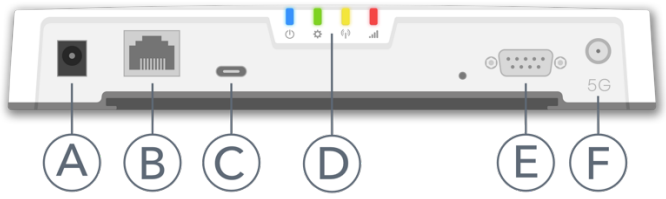
4.1 – Mounting Plate Installation

Where possible, select installation locations away from immmediate obstructions (such as network racks, metal doors, metal support posts, etc.).



1. Remove mounting plate from the GW4.
2. Secure the mounting plate using the included tape before anchoring into place using screws.
3. Slide the GW4 back onto the mounting plate.

4.2 – Ports



A) 15 VDC Power
B) Ethernet Port
C) Expansion Port
D) LED Indicators
E) 3rd Party Port
F) Antenna Port

4.3 – 3rd Party Cable (Optional)

If you will be connecting the Gateway to a 3rd party receiver as part of a property upgrade, connect the 3rd Party Cable before connecting the power supply (see the *3rd Party Cable Quick Start Guide* for more information).

4.4 – Connect & Power-On

1. Connect the included 5G cellular antenna.
2. Connect the included 15v power supply.



5| Internet Connection

The Gateway becomes cloud-connected utilizing one or more of the following internet options.

5.1 – Ethernet

- Connect the provided ethernet cable to the Gateway and a data port coming from a router or network switch.
- The Power LED will turn **blue** once online.

Note: Some network firewall restrictions can prevent the Gateway from connecting to the cloud. (See the *Firewall Troubleshooting Guide* for more information.)

5.2 – WiFi

1. Using the "Direct Connect" feature on the NextCentury Mobile App to connect to your Gateway.
2. Select the Configure button.
3. Tap on "Select Network" under the WiFi section.
4. Select your WiFi network and enter the password
5. The Power LED will turn **blue** once online.

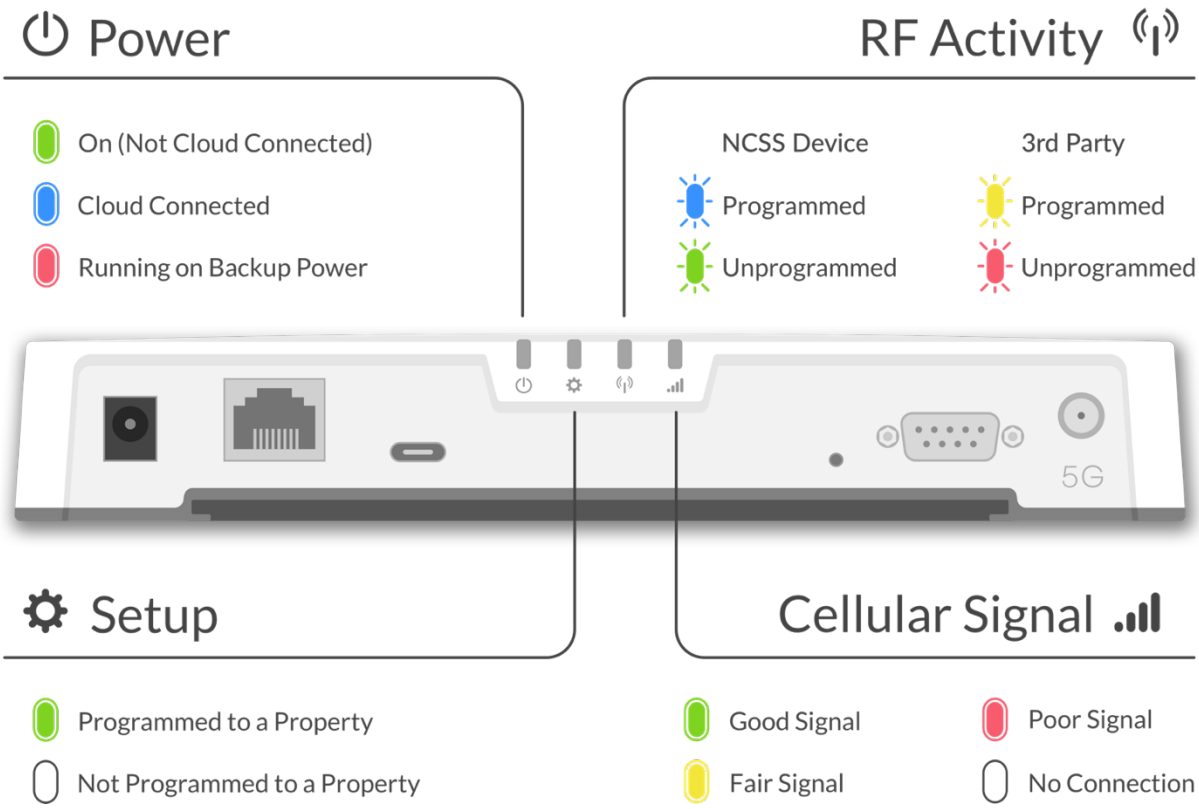
Note: Password-secured 2.4GHz WiFi only. WiFi network must not require a proxy login.

5.3 – Cellular

- To begin monthly service, select the "Enable Cellular" toggle on the website or mobile app, activating a simple no-contract cellular service.
- Cellular Signal LED will indicate if a connection is available.
- The Power LED will turn **blue** once online.

sales@nextcenturymeters.com
www.nextcenturymeters.com

7|LED Status Indicators



8| Television and Radio Interference

FCC Statement: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement: This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ISED Statement: This radio transmitter 20949-GW4 has been approved by Industry Canada to operate with the antenna types listed below with the maximum permissible gain indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Included external antenna:

- Type: DiPole
- 700/850/900MHz: Gain of 2.6dBi
- 1700/1800/1900/2100MHz: Gain of 3.6dBi
- 2600Mhz: Gain of 3.8dBi

This device complies with Innovation, Science and Economic Development Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

ISEDC Radiation Exposure Statement: This equipment complies with the IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

9| Warranty

9.1 – Scope of Warranty

NextCentury warrants that all communication equipment manufactured by NextCentury will be free from defects in materials and workmanship under normal use and in accordance with NextCentury's documented installation and operating procedures for a period of three (3) years from the date of manufacture.

Products not manufactured by NextCentury, including without limitation, accessories, attachments, or batteries used in conjunction with NextCentury equipment are only warranted, if at all, by the original manufacturer. NextCentury's warranties do not include replacement of batteries used to power NextCentury products.

9.2 – Limits of Liability

This warranty only applies to Read Management System components produced by NextCentury and does not cover any products which have been damaged by abuse, negligence, vandalism, acts of God, excessive operating conditions, normal wear and tear, unauthorized attachments or modifications, or other actions or events beyond NextCentury's reasonable control. This warranty will be nullified and voided if products are placed in non-recommended installation application/fashion, or are converted, altered, or treated by other than NextCentury recommended procedures and instructions, or are read by equipment not approved by NextCentury.

NextCentury's sole liability and customer's exclusive remedy under this warranty are expressly limited to repair or replacement of the product at NextCentury's option, and is conditioned upon the customer returning the product(s) to the location designated by NextCentury within the warranty periods or limits stated herein, and pre-paying the freight costs both to and from specified location. In no event shall NextCentury be liable for costs or expenses associated with the removal or installation of products under this warranty.

NEXTCENTURY SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE, OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES OF ANY KIND, REGARDLESS OF WHETHER SUCH LIABILITY IS BASED ON BREACH OF CONTRACT, TORT, STRICT LIABILITY, BREACH OF WARRANTIES, OR OTHERWISE, AND EVEN IF ADVISED OF THE LIKELIHOOD OF SUCH DAMAGES. INCIDENTAL AND CONSEQUENTIAL DAMAGES INCLUDE, BUT ARE NOT LIMITED TO, LOST REVENUE, LOSS OF PROFITS, DATA, BUSINESS, OR GOODWILL. NEXTCENTURY'S LIABILITY SHALL UNDER NO CIRCUMSTANCES EXCEED THE ACTUAL AMOUNT PAID BY THE PURCHASER FOR THE DEFECTIVE PRODUCT. IN ADDITION, DAMAGES RESULTING FROM NEGLIGENCE ON THE PART OF THE PURCHASER OR OTHER THIRD PARTY, INCLUDING, BUT NOT LIMITED TO, THE CARE AND MAINTENANCE OF NEXTCENTURY PRODUCTS, OR DAMAGES RESULTING FROM NEGLIGENCE REGARDING PERIODIC TESTING OF THE PRODUCT'S PERFORMANCE, ARE NOT COVERED UNDER THIS GUARANTEE.

CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY NEXTCENTURY MAY VOID THIS WARRANTY AND THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THE FOREGOING WARRANTY IS THE SOLE AND EXCLUSIVE REMEDY AVAILABLE TO THE PURCHASER AND IS IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, OR REMEDIES, WHETHER WRITTEN OR ORAL, EXPRESSED, OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, ALL OF WHICH NEXTCENTURY HEREBY EXPRESSLY DISCLAIMS.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Due to updated regulations and product improvements, NextCentury Submetering Systems, LLC reserves the right to change the product specifications without notice.

10| Contact Information

For any questions or concerns, please contact NextCentury Submetering Solutions Product Support:

- Phone: (844) 538.8203
- Email: support@nextcenturymeters.com