

# Data Gathering System

## System Overview and Specifications



### 1|System Overview

NextCentury's *Data Gathering System* is an easy to use, full feature solution developed to transform the submetering market. We have worked with users during every step of the design process to ensure that our system is the easiest to install and maintain. NextCentury is proud to bring so many innovative technologies to this market, while still maintaining reasonable prices.

### 2|Transceiver



#### 2.1 - HighLights:

- Longest ranges in class
- Easy to understand LED indicator
- Instantaneous network feedback for easy and reliable installs
- Integrated temperature sensor
- Automatic updates

#### 2.2 - Physical Dimensions:

- 74.7mm x 40.3mm x 29.1mm
- 2.9in x 1.6in x 1.1in

#### 2.3 - Operation Enviornment:

- -28C to 60C | -20F to 140F
- Up to 90% relative humidity (non-condensing)
- Must be installed in an indoor environment

#### 2.4 - Meter Compatibility:

- Compatible with virtually all pulse output meters. (See NextCentury Meter Combatibility Sheet)

#### 2.5 - Data Resolution:

- Default check-in rate is every 6 hours.
- Adjustable from 1 hr to 24 hours ( 15 minute intervals available for integrated designs).

#### 2.6 - Communications:

- 900mHz extended long distance radios
- Bi-directional communications
- Integrated encryption engine
- Frequency hopping spread spectrum

#### 2.7 - Warranty:

- 3 Year Warranty (See Data Gathering System Warranty sheet)

#### 2.8 - Certifications:

- FCC: 2A8BI-TR-20-214
- IC: 20949-TR20214

#### 2.9 - Power Requirements:

- CR123A (2/3 A-size) 3V lithium battery
  - Battery included
  - Replacement battery available from NextCentury
- Average battery life 6 years average

**Note:** Average battery life assumes constant operating temperatures are between 70°F and 90°F, and the default data resolution. Battery life may be reduced with operation outside of these ranges.

### 3|Repeater



#### 3.1 - HighLights:

- Longest ranges allowed by FCC
- Easy to understand LED indicator
- Instantaneous network feedback for easy and reliable installs
- Automatically increases coverage by amplifying signals in a mesh network
- Automatic updates

#### 3.2 - Physical Dimensions:

- 102.7mm x 65.75mm x 22.7mm
- 4in x 2.6in x .9in

#### 3.3 - Operation Enviornment:

- -28C to 60C | -20F to 140F
- Up to 90% relative humidity (non-condensing)
- Must be installed in an indoor environment or appropriate outdoor enclosure

#### 3.4 - Communications:

- 900mHz extended long distance radios
- Integrated encryption engine
- Frequency hopping spread spectrum

#### 3.5 - Warranty:

- 3 Year Warranty (See Data Gathering System Warranty sheet)

#### 3.6 - Certifications:

- FCC: 2A8BI-RE-40-214
- IC: 20949-RE40214

#### 3.7 - Power Requirements:

- 120/240 VAC wall transformer (Included)

## 4 | Cellular Gateway



### 4.1 - HighLights:

- Integrated 3G/LTE Cellular Modem
- A53 Quad-Core Processor
- 4GB Memory (1 Year Offline Storage)
- Power Backup (To generate power-loss alert)
- Up to 5,000 units on a single Gateway
- Easy to understand LED indicators
- Direct Connect to Android or iOS mobile devices
- Stores data from Transceivers and delivers it to *NextCentury Cloud*
- Automatic updates

### 4.2 - Physical Dimensions:

- 204.8 mm x 139.7 mm x 30.2 mm
- 8.1 in x 5.5 in x 1.2 in

### 4.3 - Operation Environment:

- -28C to 60C | -20F to 140F
- Up to 90% relative humidity (non-condensing)
- Must be installed in an indoor environment or appropriate outdoor enclosure

### 4.4 - Cloud Connectivity Options:

- Cellular
- Ethernet
- WiFi

### 4.5 - Cellular:

- Industrial-grade 3G/LTE cellular modem
- External antenna included
- Multiple cellular networks (T-Mobile & AT&T)
- Easy management
- Low cost, no contracts, no hidden fees
- Turn on/off remotely at any time

### 4.6 - Communications:

- 900mHz extended long distance radios
- Integrated encryption engine
- Frequency hopping spread spectrum

### 4.7 - Warranty:

- 3 Year Warranty (See Data Gathering System Warranty sheet)

### 4.8 - Certifications:

- FCC: Contains 2AB8I-RE-40-214
- FCC: Contains VZFSWN80MA6
- FCC: Contains A8TBM71S2
- IC: Contains 20949-RE40214
- IC: Contains 10609A-SWN80MA6
- IC: Contains 12246A-BM71S2

### 4.9 - Power Requirements:

- 120/240 VAC wall transformer (Included)

## 5 | NextCentury Cloud



### 5.1 - HighLights:

- Cloud-based solution
  - No dedicated PC
  - No software installed
  - Data available anytime and anywhere
- Reports
  - Customizable reports
  - Reports can be sent automatically to email or FTP server
- Alerts
  - Freeze detection, leak detection, device tamper, network, power loss, and low battery
  - Sent automatically via email or text message
- API
  - RESTful web API
  - Fully documented and maintained

## 6 | Mobile App



### 6.1 - HighLights:

- Available for Apple and Android devices
- Makes equipment installs quick and easy
- Direct Connect to Gateway for setup
- Shows GPS locations of equipment
- Integrated barcode scanner using mobile device's camera
- See property status at a glance
- Easily replace equipment