



## REMOTE WATER LEVEL MONITORING AND REAL-TIME DATA COLLECTION

### WIU-X – Wireless Water Level Interface Unit

#### EASY WIRELESS WATER LEVEL MONITORING FOR REAL-TIME DATA COLLECTION

The eleven-x WIU-X enables wireless connectivity for currently unconnected dataloggers to facilitate remote monitoring capabilities. The WIU-X is a hardware/software solution that uses low power, LoRaWAN™ protocol to enable wireless water level communication without the need to install new devices.

Maintain use of all the functionality of your currently installed dataloggers and realize enhanced water level monitoring capabilities such as real-time level tracking and data capture, and pre-configured automated alerts based on high or low water thresholds as part of a complete Smart Water infrastructure. The eleven-x WIU-X enables the monitoring of water levels for underground aquifers, reservoirs, rivers, lakes, or water tower levels.

#### REAL-TIME DATA = IMPROVED WORKFLOWS

Enable streamlined operations and improved water level tracking while saving money, time and resources. Easy 3-step installation process means your current devices can be connected wirelessly and in full operation in matter of minutes with the WIU-X, without the cost of replacing existing devices to get smart water monitoring capabilities.

#### LOW TOTAL COST OF OWNERSHIP

Enable streamlined operations and improved water level tracking while saving money, time and resources. Easy 3-step installation process means your current devices can be connected wirelessly and in full operation in matter of minutes with the WIU-X, without the cost of replacing existing devices to get smart water level monitoring capabilities.

Reduce operational costs by eliminating the need for time-consuming manual data collection and product updates. The WIU-X interface unit can be configured remotely with no programming needed, making remote wireless data collection easy. The WIU-X offers a long battery life [>10 years], low connectivity fees and near-zero maintenance costs, resulting in a low total cost of ownership.

#### eleven-x WIU-X BENEFITS:

- Enables real-time data communication
- Retrofit with current unconnected monitoring devices
- Uses low power LoRaWAN™ protocol
- Remote programmable water level data collection
- Variable scheduling capabilities
- Pre-configurable alerting capabilities based on high or low water conditions
- Reduces operational costs
- In-field updates
- Low total cost of ownership:
  - Low connectivity fees
  - Near-zero maintenance
  - >10-year battery life
- Simple 3-step installation process
- Secure two-way wireless communications:
  - AES-128 encryption
  - Device Authentication
- Supports a wide range of monitoring devices



**TECHNICAL SPECIFICATIONS**

**Communications**

Communication Protocol	LoRaWAN™ 1.0.1
Device Class	Class A
Frequency	902-928 MHz – North American Standard ISM Band
Transmit Power	Up to 20dBm

**Mechanical**

Enclosure	Ruggedized enclosure
Antenna	Internal
Ingress Rating	IP67 – waterproof   dustproof
Mounting	Wall Mounting

**Security**

AES-128 encryption
Tamper Detection
Temperature

**Provisioning**

Secured key injection and key exchange
Key management with join server
NFC provisioning support [optional]
Infield or back office secure provisioning

**Environments**

Operating Ambient	-30°C to 60°C
Components	rated at a minimum of -30°C to 85°C
Battery	>10-year battery life
Battery Capacity	3.6V, 7200mAh

**Warranty**

1 year
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**Certifications**

LoRaWAN
FCC Part 15.247
ISED RSS-247

FOR MORE INFORMATION:

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**About eleven-x Inc.**

eleven-x operates Canada's first and only coast-to-coast public low power network optimized for IoT that enables the promise of Smart Cities, Buildings, Campuses and Enterprise IoT applications. Supporting the use of low cost battery powered sensors, the LoRaWAN™ based network addresses many Internet of Things [IoT] use cases where requirements include wireless connectivity, devices that require long battery life, no maintenance and a low total cost of ownership.

WIU-X +  
DATALOGGER



LORAWAN  
NETWORK



CLOUD



BACK OFFICE  
APPLICATIONS

