

# WAVELET LIFT STATION KIT

## SUMMARY

The Wavelet Lift Station Kit provides information to operations, maintenance, collections and modeling groups. The Kit includes a submersible hydrostatic sensor, float switch, three discrete inputs (with an optional I/O expander), three-phase power analyzer, and in-line pressure sensor. Monitor critical parameters, including level, pump run time, power availability, and pressure in the check valve.

Management of power and pump failures and other time-sensitive conditions is aided by the Wavelet's automatic SMS and email alerts. Operators can also track pump starts and run time.

## FEATURES

- ▶ Automatic SMS & Email Alerts
- ▶ Accurate Flow Computation
- ▶ Multi-Parameter Monitoring
- ▶ Energy Efficient

## APPLICATIONS

- ▶ Monitor Pump Run Time
- ▶ Identify Service Interruptions
- ▶ Protect Public Health & Safety
- ▶ Prevent Network Damage

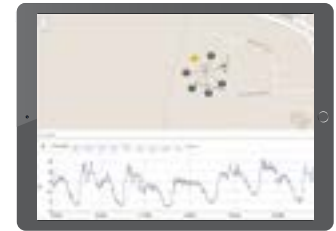
## SENSOR SPECIFICATIONS

### A. Non-Contact Ultrasonic Level Sensor

<b>Range</b>	0.3 – 7.5 m (1 – 25 ft). Other ranges available upon request.
<b>Accuracy</b>	0.25% of measurement range. Internal temperature compensation included.
<b>Beam Pattern</b>	9° off axis
<b>Frequency</b>	43 kHz or 69 kHz (depending on model)
<b>Body Material</b>	PC/PBT blend upper housing; ceramic, PVDF faced transducer
<b>Operating Temperature</b>	-34°C to 60°C (-30°F to 140°F)

### B. Level Switch

<b>Control Differential</b>	3.8 cm (1.5 in.) above or below horizontal
<b>Housing</b>	High impact, corrosion resistant polypropylene
<b>Max. Water Depth</b>	9 m (30 ft)
<b>Max. Pressure</b>	2.1 bar (30 psi)
<b>Max. Liquid Temperature</b>	60°C (140°F)



A.



A1.



B.



C.



C1.



Model No. WA1111-SE00011-SE00015-  
SE00094-SE00094-SE00094-SE00109-  
WA00129-WA00134-WA00135-  
WA00141-WA00155

**Wavelet Lift Station Kit includes:**

- Wavelet Device & Activator
- 4G (LTE), 3G, 2G Global SIM Card
- Internal Lithium Battery
- Installation Hardware
- External Power Connector
- **WA00129** External Cellular Antenna
- **WA00141** 3 m (10-ft) Discrete Port Cable
- **A. SE00011** Non-Contact Ultrasonic Level Sensor, 0.3-7.5 m (1-25 ft) Range, 10.7 m (35-ft) Cable
- **A1. WA00117** Non-Contact Ultrasonic Level Sensor Installation Hardware
- **B. SE00015** Float Level Switch, 15 m (50-ft) Cable
- **C. SE00094** AC Current Transformer (Primary 100A, Secondary 5A), Split Core 2.4 cm (0.9 inch.) Window, 1 m (3-ft) Cable
- **C1. WA00134** Three-Phase Power Analyzer
- **D. SE00109** General Purpose Pressure Sensor, 0-6.9 bar (0-100 psi), 6 m (20-ft) Cable
- **E. WA00135** Modbus I/O Expander with 12 Digital Inputs and 4 Relay Outputs

**C. AC Current Transformer (Primary 100A, Secondary 5A)**

<b>Input Current</b>	0 – 100 Amp AC*
<b>Overload</b>	160 Amp AC
<b>Rated Frequency</b>	50/60Hz
<b>Rated Voltage</b>	0 - 66kV
<b>Accuracy</b>	≤ 1.5% of full span
<b>Operating Temperature</b>	-15°C to 45°C (5°F to 113°F)

**D. Pressure Sensor**

<b>Range</b>	0 – 6.9 bar (0 – 100 psi). Other ranges available upon request.
<b>Over Pressure Protection</b>	2x rated pressure
<b>Accuracy</b>	±0.5% of full span
<b>Operating Temperature</b>	-40°C to 100°C (5°F to 113°F)

**ACCESSORY SPECIFICATIONS**

**C1. Three-Phase Power Analyzer (used with C.)**

<b>Power Supply</b>	10-40 VDC or 18-28 VAC - 50/60Hz
<b>Voltage Input</b>	Direct connection up to 500V RMS max. (40-70Hz)
<b>Accuracy</b>	Voltage: ±0.5% RDG; Current ±0.5% RDG; Active & Reactive Power: ±0.5% RDG
<b>Operating Temperature</b>	-10°C to 60°C (14°F to 140°F)

**E. Modbus I/O Expander with 12 Digital Inputs and 4 Relay Outputs**

<b>Power Supply</b>	10-40 VDC, 20-28 VAC, 50-60 Hz
<b>Ingress Protection</b>	IP 20
<b>Operating Temperature</b>	-15°C to 65°C (5°F to 149°F)