## **WIRELESS**

## Flex Logger

The most flexible and robust temperature and relative humidity monitoring system for precast and cast in place projects. Flex logger works standalone in LTE mode or can be grouped together in LoRa mode with multiple Flex loggers and a Relay V2 for extended battery life and radio range. Using plug and play probes, measurements are accurate, reliable and require minimal labor to prepare. Rugged and reliable, the hardware is waterproof and steam proof and can be used in extreme environments.

SKU: EX-FL-1



## **Features**

- · Multiple wireless radios
  - LTE Cat M1 / NB-IOT cellular: For stand-alone use (no Relay required)
  - LoRa: Logger communicates with Relay V2, this extends battery life and relays signal into hard to reach areas
  - BLE: Download data onto your phone in areas where cellular connectivity is unavailable
  - GPS: Locate your device in the field\*
- Up to 8\* temperature ports
  - · New 4-pin connector to improve robustness to moisture and physical damage
  - Supports analog and digital temperature probes
  - · Supports user replaceable ambient humidity probes
- On-board temperature sensor
- 90+ day offline memory
- · Local log retrieval via BLE on mobile phone
- Built-in charging port
- · LED indicator for battery and signal status
- Remote firmware over-the-air (OTA) updates
- · Remote fault detection
- · Sustainable design
- · For outdoor and indoor use
  - · Outdoor use without the charger
  - · Indoor use with the charger

\*Flex GPS requires direct line-of-sight to open sky. Indoor use may not return a location.

\*with Flex Input Splitter

## **Technical Specifications** \*with Flex Input Splitter

warnex input spinter	
# of Inputs	Temperature: 8* external + 1 ambient RH: 1 external
Device Operating Range	-20 °C to 60 °C (-4 °F to 140 °F)
Measurement Range	-30 °C to 120 °C (-22 °F to 248 °F)
Accuracy/Resolution	±0.2 °C (±0.4 °F) / 0.1 °C (0.2 °F)
Battery	Runtime: 4 months (LTE). 24 months (LoRa). Charge time: 14 hrs
Input Voltage	5.0 V, 2A Max 10.0 W
Relative Humidity	0-100% RH
Altitude	Up to 2 km (1.24 mi)
Interval	Default: 15 minutes Optional: 5 minutes or 60 minutes
Memory	90 days @ 15 min intervals
Country Compatibility	See appendix
Cellular Technology	LTE Cat M1, NAmer: Bands 2,4,12. Europe: Bands 3,8,20. Australia: Bands 28. LoRa: 915 MHz (CA/USA/ AUS) / 868 MHz (EU)
Radio Range	LoRa: >800 m (0.50 mi) line of sight to Relay LTE: ~1 km (0.62 mi) line of sight to tower
Ingress Protection	Dust/Steam/Waterproof - IP67
Dimensions	194 mm x 118 mm x 55 mm (5.9 in x 4.7 in x 2.2 in)
Weight	600 g (1.32 lbs)