



AT A GLANCE

10 yr

Battery life on a single replaceable AA cell – no wiring, no recharging

Class A

Standard LoRaWAN – pairs with any US915 LoRaWAN gateway

KEY FEATURES

- Battery-powered LoRaWAN temperature & humidity monitoring for pharmacy, healthcare, cold-chain, and labs
- Built-in temperature & humidity sensor plus an external connector for a digital temperature probe (-55 to 125 °C)
- Class A LoRaWAN (US915) – long-range, low-power uplinks to the ATEK platform via any standard gateway
- Up to 10-year life on one replaceable Li-SOCl₂ AA cell – no mains wiring, no recharging
- On-device datalog buffers readings during network loss and back-fills automatically on reconnect
- Tap-to-configure (NFC) and remote downlink configuration – interval, alarms, and keys set over the air

Wire-Free, Long-Range Coverage

ATEK-T-LW-TH runs for years on a single battery and reaches far-flung fridges, freezers, and remote rooms a Wi-Fi access point can't – ideal for multi-site and hard-to-cable storage.

CERTIFICATIONS

FCC

MEASUREMENT PERFORMANCE

Parameter	Built-in Temp	Built-in Humidity	External Probe
Sensing	✓	✓	✓
Measurement range	-40 to 80 °C	0 to 96 % RH	-55 to 125 °C
Resolution	0.01 °C	0.04 % RH	0.0625 °C
Accuracy (typ.)	±0.3 °C	±3 % RH	±0.5 °C (-10 to 85 °C)
Long-term drift	< 0.02 °C/yr	< 0.25 % RH/yr	–

TECHNICAL SPECIFICATIONS

Parameter	Specification
WIRELESS CONNECTIVITY	
Technology	LoRaWAN Class A
Protocol version	LoRaWAN 1.0.3
Frequency band	US915
Activation	OTAA / ABP
Gateway	Works with any standard US915 LoRaWAN gateway
Cloud platform	ATEK platform – real-time readings, trends, and alarms
BUILT-IN TEMPERATURE	
Range	-40 to 80 °C (-40 to 176 °F)
Resolution	0.01 °C
Accuracy	±0.3 °C (typ.); drift < 0.02 °C/yr
BUILT-IN HUMIDITY	
Range	0 to 96 % RH
Resolution	0.04 % RH
Accuracy	±3 % RH (typ.); drift < 0.25 % RH/yr
EXTERNAL TEMPERATURE PROBE	
Type	Digital temperature probe on external connector
Range	-55 to 125 °C (-67 to 257 °F)
Resolution	0.0625 °C
Accuracy	±0.5 °C (-10 to 85 °C); ±2 °C (-55 to 125 °C)

WHERE IT'S USED

- Multi-site pharmacy fridge & freezer monitoring
- Vaccine cold-chain compliance
- Warehouse & distribution-centre environmental monitoring
- Remote & hard-to-cable storage rooms
- Hospital medication storage
- Lab & incubator temperature tracking

ORDERING INFORMATION

ATEK Part Number	Description
DGN-T-LHT65N-US915	LoRaWAN temperature & humidity transmitter (US915) — built-in temp/RH + external digital temperature probe, battery-powered Class A

Contact ATEK for volume pricing, deployment kits, gateways, and calibration certificate options.

ATEK PLATFORM INTEGRATION

- Real-time temperature & humidity readings, trends, and alarms within seconds of each LoRaWAN uplink
- Automated compliance reporting — scheduled CSV / PDF / Excel exports with hourly, daily, and monthly aggregations
- Multi-channel alerts — email, SMS, voice call, and webhook on excursion
- Immutable time-series storage with tamper-evident audit logs
- 21 CFR Part 11 controls on the ATEK platform — user-level audit trails, e-signatures, ALCOA+ data integrity (validate for your intended use)
- Calibration tracking — each probe's certificate auto-associates by serial number with expiry alerts and audit trail
- Network-loss resilience — on-device datalog back-fills automatically once LoRaWAN coverage is restored