



AT A GLANCE

0.1 °C

Calibrated temperature accuracy, -40 to 80 °C

2 % RH

Humidity accuracy, full 0 to 100 % RH range

65,535 Lux

Light measurement up to 65,535 Lux, 1 Lux resolution

KEY FEATURES

- Three-in-one wireless monitoring – temperature, humidity, and ambient light from a single calibrated probe
- WPA2-Enterprise Wi-Fi connectivity – readings stream to the ATEK platform in real time
- Calibrated digital probe with included calibration certificate and a unique serial number
- Backlit display with min/max reset and power-loss detection
- Mains-powered (5 V, 500 mA) with an internal rechargeable battery for backup operation
- 6 months of on-board data storage at 5-minute intervals for uninterrupted records

Pairs With a Compliance-Ready Platform

Use ATEK-T-WF-THL with the ATEK platform, which provides 21 CFR Part 11 controls – audit trails, e-signatures, and ALCOA+ data integrity. Validate compliance for your intended use.

CERTIFICATIONS

CE

FCC

MEASUREMENT PERFORMANCE

Parameter	Temperature	Humidity	Light
Sensing	✓	✓	✓
Measurement range	-40 °C to 80 °C	0 to 100 % RH	1 to 65,535 Lux
Resolution	0.01 °C	0.01 % RH	1 Lux
Accuracy	0.1 °C	2 % RH	10 Lux
On-device display	✓	✓	✓

TECHNICAL SPECIFICATIONS

Parameter	Specification
WIRELESS CONNECTIVITY	
Technology	Wi-Fi 2.4 GHz, WPA2-Enterprise
Cloud platform	ATEK platform – real-time readings, trends, and alarms
Transmit interval	30 s on mains power, 15 min on battery
Recording interval	5 min; 6 months on-board storage
TEMPERATURE	
Range	-40 °C to 80 °C (-40 °F to 176 °F)
Resolution	0.01 °C
Accuracy	0.1 °C (calibrated)
HUMIDITY	
Range	0 to 100 % RH (condensation-free)
Resolution	0.01 % RH
Accuracy	2 % RH
LIGHT / LUMINOSITY	
Range	1 to 65,535 Lux
Resolution	1 Lux
Accuracy	10 Lux
PHYSICAL & POWER	
Enclosure	84 × 84 × 32 mm (3.3 × 3.3 × 1.25 in)
Power	5 V / 500 mA mains, internal rechargeable battery backup
Display	Backlit display – temperature, humidity & light, min/max reset, power-loss detection
Calibration	Calibration certificate included, unique serial

WHERE IT'S USED

- Animal research laboratory monitoring
- Greenhouse climate & light tracking
- Agricultural facility environmental control
- Environmental chamber qualification
- Museum & archive preservation (light exposure)
- Controlled-environment research labs

ORDERING INFORMATION

A TEK Part Number	Description
A TEK-T-WF-THL	WiFi temperature, humidity & light transmitter — -40 to 80 °C (0.1 °C), 0 to 100 % RH (2 % RH), 1 to 65,535 Lux (10 Lux)

Contact A TEK for volume pricing, deployment kits, and calibration certificate options.

A TEK PLATFORM INTEGRATION

- Real-time temperature, humidity & light readings, trends, and alarms within seconds of each Wi-Fi 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 A TEK 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 — 6 months of on-board storage backfills automatically once Wi-Fi is restored