



AT A GLANCE

+600 °C

Upper range — covers ovens, sterilizers, and autoclaves down to -100 °C

0.1 °C

Calibrated accuracy from a 4-wire PT100 RTD probe

KEY FEATURES

- Enterprise-grade wireless high-temperature monitoring for ovens, sterilizers, autoclaves, and process heat
- 4-wire PT100 RTD probe with a braided stainless-steel sheath and 3 m cable for harsh, high-heat environments
- WPA2-Enterprise Wi-Fi connectivity — readings stream to the ATEK platform in real time
- Calibrated 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-RTD-HT 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	High-Temperature RTD
Sensor type	RTD PT100, 4-wire
Measurement range	-100 °C to +600 °C
Resolution	0.01 °C
Accuracy (standard)	0.5 °C
Accuracy (calibrated)	0.1 °C
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 (RTD PT100)	
Sensor type	RTD PT100, 4-wire configuration
Range	-100 °C to +600 °C
Resolution	0.01 °C
Accuracy	0.5 °C standard / 0.1 °C calibrated
PROBE	
Construction	Braided stainless-steel sheath
Cable length	3 m
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, min/max reset, power-loss detection
Calibration	Calibration certificate included; unique serial number
COMPLIANCE	
Certifications	CE, FCC

WHERE IT'S USED

- Drying oven monitoring ($\approx 40\text{ }^{\circ}\text{C}$)
- Sterilizer cycle monitoring ($\approx 130\text{ }^{\circ}\text{C}$)
- Autoclave validation ($\approx 230\text{ }^{\circ}\text{C}$)
- Industrial & laboratory oven monitoring ($\approx 400\text{ }^{\circ}\text{C}$)
- Depyrogenation & process-heat validation
- High-temperature thermal mapping

ORDERING INFORMATION

ATEK Part Number	Description
ATEK-T-WF-RTD-HT	WiFi high-temperature RTD transmitter — PT100 4-wire, -100 to $+600\text{ }^{\circ}\text{C}$ ($0.5\text{ }^{\circ}\text{C}$ standard / $0.1\text{ }^{\circ}\text{C}$ calibrated)

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

ATEK PLATFORM INTEGRATION

- Real-time high-temperature 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 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 — 6 months of on-board storage backfills automatically once Wi-Fi is restored