



AT A GLANCE

0.10 Pa

Differential pressure accuracy across the ± 500 Pa range

0.01 Pa

Resolution from a stable CMOS differential pressure sensor

KEY FEATURES

- Enterprise-grade wireless differential pressure monitoring for cleanrooms, airlocks, and containment
- WPA2-Enterprise Wi-Fi connectivity — readings stream to the ATEK platform in real time
- Calibrated CMOS sensor 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-DIFFPRES 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	Differential Pressure
Sensing	✓
Measurement medium	Air
Reading range	-500 to +500 Pa
Resolution	0.01 Pa
Accuracy	0.10 Pa
Long-term stability	± 0.05 Pa / year
Sensor type	CMOS
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
DIFFERENTIAL PRESSURE	
Measurement medium	Air
Reading range	-500 to +500 Pa
Resolution	0.01 Pa
Accuracy	0.10 Pa (calibrated)
Long-term stability	± 0.05 Pa / year
Sensor type	CMOS
Units	Pa (pascals). ± 500 Pa $\approx \pm 2.0$ inH ₂ O (derived conversion)
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 — differential pressure, min/max reset, power-loss detection
Calibration	Calibration certificate included; unique serial number

WHERE IT'S USED

- Sterile-preparation pharmacy areas
- ISO Class 5 / 6 / 7 / 8 clean rooms
- Pressurized airlocks & antechambers
- Chemical & biological hoods
- Containment & isolation suites
- Negative- and positive-pressure room verification

ORDERING INFORMATION

ATEK Part Number	Description
ATEK-T-WF-DIFFPRES	WiFi differential pressure transmitter — -500 to +500 Pa, 0.01 Pa resolution, 0.10 Pa accuracy

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

ATEK PLATFORM INTEGRATION

- Real-time differential pressure 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 sensor'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