

36通道多点气流和温度测量系统

36 Channel Multipoint Airflow & Temperature Measurement System

特点

Feature

|| 可连接 36个气流速度和气流温度传感器 (UAS1000系列)和/或热电偶传感器 (UTS1000系列)

- 快速和精确地验证热和气流模型
- 同时在多个地方测量气流和温度
- 小传感器可以进行远程测量和在紧凑的地方测量
- USB连接到 PC
- 包括新的改进后的 AccuTrac调试软件
- 便于使用 – 只要插上电源就可以开始使用
- 气流测量精度在 0°C到 70°C范围为读数的 ± 5%

Connect 36 air velocity and airflow temperature sensors (UAS1000 Series) and/or thermocouple sensors (UTS1000 Series)

- Validate thermal and airflow models quickly and accurately
- Measure Air & Temperature in multiple locations simultaneously
- Small sensors access remote and compact locations
- USB connection to PC
- New and improved AccuTrac software included
- Easy to use – just plug in and start measuring
- Airflow measurement accuracy 5% of reading from 0° C to 70° C



应用说明

|| 在新产品开发过程中，气流速度和表面温度测量是关键步骤。然而，传统上这些测量一直是不准确、花费大量劳力、多次

重复和乏味的。新的ATM2400就是设计成能减少费用、增加效率、提高精度和压缩测试和评估时间。此外，ATM2400比其上一代产品ATM-24扩展了一些性能，加入了温度传感器，改进了气流传感器的精度，增强了AccTrac5.0软件功能，并增加了12个通道。

ATM2400可以在36个位置同时测量气流速度、气流温度、表面温度。多个ATM可以连接起来，测量多达100多个点。可以实时记录信息，并对记录的信息进行分析。ATM2400使用UAS系列气流传感器和UTS系列热电偶传感器，改善的气流速度精度在0°C到70°C可以达到读数的±5%，进一步加强了ATM2400的性能。

AccuTrac 5.0是功能强大的以Windows为基础的软件包，与ATM2400一起提供，带有实时图表和统计分析功能。AccuTrac的新功能还包括设置测试时间长度、显示传感器的校验时间、当收集的数据超出传感器的校验范围时发出告警。采样率可以高达每秒10个读数。所有的数据存储为Excel文件格式。典型的应用包括计算机设备和电信设备内电子产品的热分析、CFD、计算流体动力学、气流和温度模型的验证、汽车车厢、防护室和建筑建模的气流分析。

无论您在决定风扇的个数、分析关键元件周围的气流、或确认软件预测模型，著名的气流测量专家AccuSense公司提供的ATM2400，是最新的多点测量气流和温度的一流测量仪器。

Application

Multipoint measurement of air velocity as well as air and surface temperature are crucial steps in the new product development process. These measurements, however, have traditionally been inexact, labor-intensive, repetitive, and tedious. The new AccuSense ATM2400 has been designed to reduce cost, increase efficiency, improve accuracy and compress testing and evaluation time. Furthermore, the ATM2400 expands on the capabilities of its predecessor, the ATM-24, with the inclusion of thermocouple sensors, improved airflow sensor accuracy, enhanced AccuTrac 5.0 software as well as an

additional 12 channels.

The ATM2400 now allows you to perform simultaneous measurement of air velocity and of airflow and surface temperatures at 36 locations. Multiple ATM's can be connected together to measure up to 100 points. The information is recorded real-time, and can be analyzed as data is being collected. The ATM2400 uses the UAS Series of Airflow Sensors and UTS Series of Thermocouple Sensors. Improved air velocity accuracy to $\pm 5\%$ of reading from 0°C to 70°C further enhances the ATM2400's performance.

AccuTrac 5.0, a powerful Windows-based software package, comes with the ATM2400. With real-time graphing and statistical analysis, AccuTrac's new capabilities also include the ability to set testing time length, display calibration date of sensors, and alarm when collected data is outside of the sensor calibration range. The sampling rate is now as fast as 10 readings per second. All data is saved in Excel compatible files. Typical applications include thermal analysis of electronics in computer and telecommunications equipment, validation of CFD airflow and temperature modeling, airflow analysis in automotive compartments, containment enclosures, and architectural modeling.

Whether you are determining the number of fans, analyzing airflows around critical components, or validating software prediction models, the ATM2400, from AccuSense, the renowned expert in airflow sensing, is the new gold standard for multipoint airflow and temperature monitoring.

IV 技术参数

运行温度 ATM2400 为 10°C – 40°C

储存温度 -20°C – +70°C

相对湿度 (无结露) 5-95%

输入电压 92-240VAC, 50-60 Hz 内部电源 '包括电源线

密度修正通过 AccuTrac 5.0 软件

采样率 0.1 秒至 60 分钟

尺寸 235 mm 长 X 300 mm 宽 X 35 mm 高

重量 2.5 kg

Technology Specification

Operating temperature 10°C – 60°C for the ATM2400 hub

Storage temperature -20°C – 70°C

Relative humidity (non-condensing) 5-95%

Supply voltage 92-240VAC, 50-60 Hz internal power supply. Power cord included

Density correction Via AccuTrac 5.0 software

Sampling rate 0.1 seconds to 60 minutes

Dimensions 235 mm long X 300 mm wide X 35 mm high

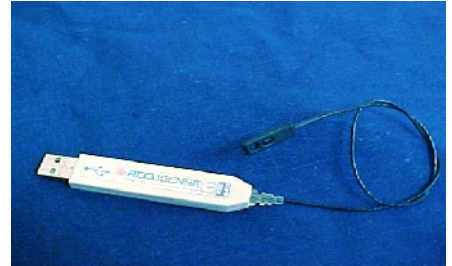
Weight 2.5 Kg

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特点

Feature

- UAS1000 可以同时测量气流速度和气流温度
- 传感器连接至 ATM2400 数据中心
- 便于使用 – 只要插入就可以开始测量
- 快速和精确地验证热和气流模型
- 小型传感器可以伸入到远程和位置紧凑的地方
- 从 0-70°C 的测量精度为读数的±5%
- 互相之间完全可互换
- 3 种可选传感头



- *UAS1000 measures air velocity and airflow temperature simultaneously*
- *Sensors connect to the ATM2400 data hub*
- *Easy to use – just plug in and start measuring*
- *Validate thermal and airflow models quickly and accurately*
- *Small sensors to reach distant and compact locations*
- *±5% of reading accuracy from 0-70°C*
- *Fully interchangeable with one another*
- *3 sensor head options*

技术参数

运行温度0°C ~ 70°C

储存温度-20°C ~ 80°C

相对湿度(无结露) 5-95%

上电后的开始工作时间小于 5 秒

输入电压由 ATM2400 供电

Technology Specification

Operating temperature 0°C to 70°C

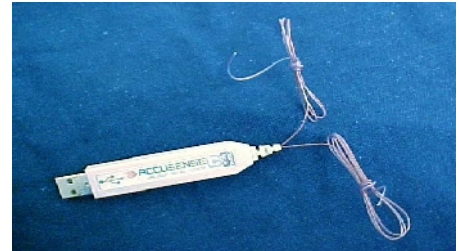
Storage temperature 0°C to 80°C

Relative humidity (non-condensing) 5-95%

Warm-up time after power up Less than 5 seconds

Supply voltage Supplied by ATM2400 data hub

- UTS 测量表面温度 精度为 $\pm 1^{\circ}\text{C}$
- 传感器连接到 ATM2400 数据中心盘
- 便于使用 – 插上就可以开始测量
- 电隔离达 1500V
- 根据模型的不同适用于T 型和K 型热电偶
- 卓越地用于测量带电的电子产品
- 热电偶与传感器身均可以互换



- *UTS Series measures surface temperatures from -50°C to 250°C with $\pm 1^{\circ}\text{C}$ accuracy*
- *Sensors connect to the ATM2400 data hub*
- *Easy to use – just plug in and start measuring*
- *Electrically isolated up to 1500V.*
- *Small sensors to reach distant and compact locations*
- *Welded tips for quick installation*
- *Excellent for measuring live electronics*

技术参数

连接头运行温度 $10^{\circ}\text{C} \sim 60^{\circ}\text{C}$

存储温度 $0^{\circ}\text{C} \sim 80^{\circ}\text{C}$

相对湿度（无结露）5-95%

UTS1000T 测量范围 $-50^{\circ}\text{C} \sim 148^{\circ}\text{C}$ '30 AWG ；

上电后开始工作时间最多 5 秒

精度 $\pm 1^{\circ}\text{C}$

输入电压由 ATM2400 供电

USB/ATM2400 连接头尺寸 100 mm 长 X 17 mm 宽 X 8 mm 厚

Technology Specification

Operating temperature for connector 10°C to 60°C

Storage temperature 0°C to 80°C

Relative humidity (non-condensing) 5-95%

TC measurement range -50°C to 148°C '30 AWG

Warm-up time after power up 5 seconds max

Accuracy $\pm 1^{\circ}\text{C}$

Supply voltage Supplied by the ATM2400 data hub

Connector dimensions 100 mm long X 17 mm wide X 8 mm thick

