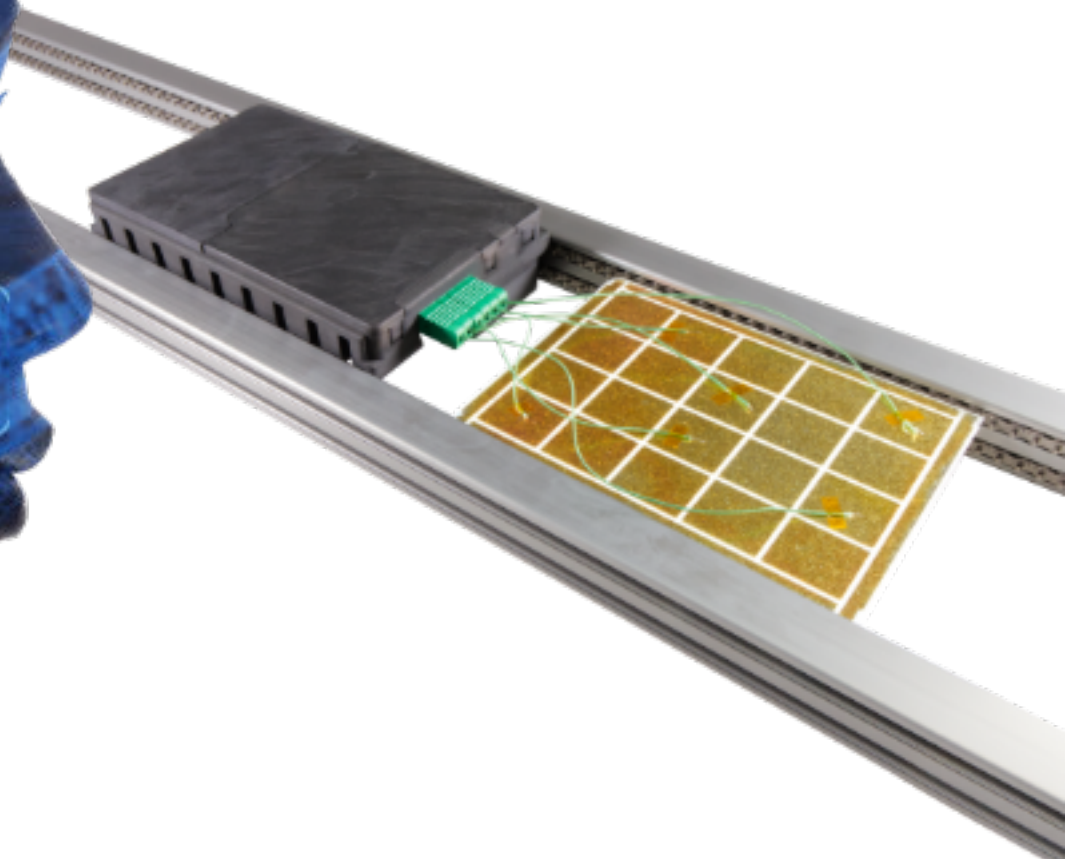


A stylized blue silhouette of a human head in profile, facing right. The interior of the head is filled with various industrial and technological icons, including gears, circuit boards, and data charts. The overall theme is industrial intelligence and automation.

AHMT



industrial applications



The “Omnibus”

Multi Sensor Reflow Profiler



We enable an efficient and sustainable production of electronic products.

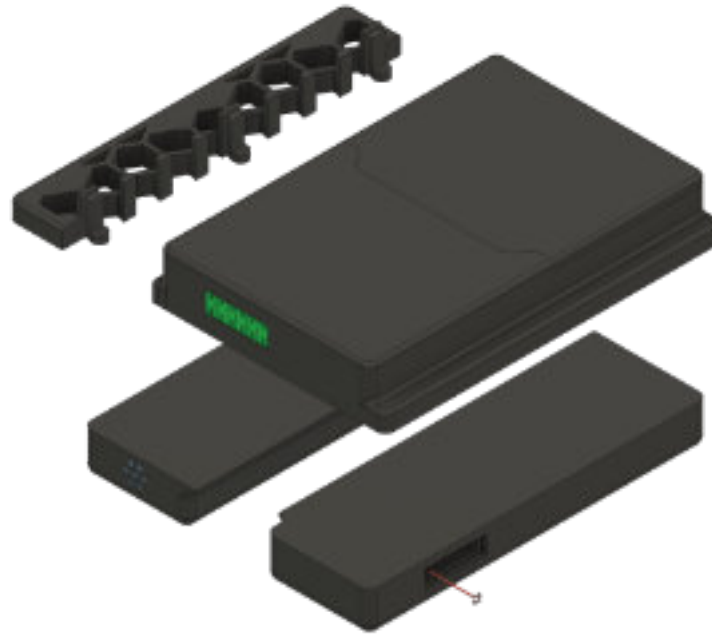
AHMT offers advanced services, sensors and software for continuous monitoring and optimization of manufacturing processes for (power) electronics. The aim is to increase the quality of customer products and to reduce production and complaint costs in the long term.

MODERN DATA LOGGING



The AHMT Omnibus data logger enables total process control of reflow lines to increase yield and quality of the production. The wireless system measures temperature, atmosphere and multiple mechanical settings of the oven and the previous as well as post processes.

MODULAR MULTISENSOR CONCEPT

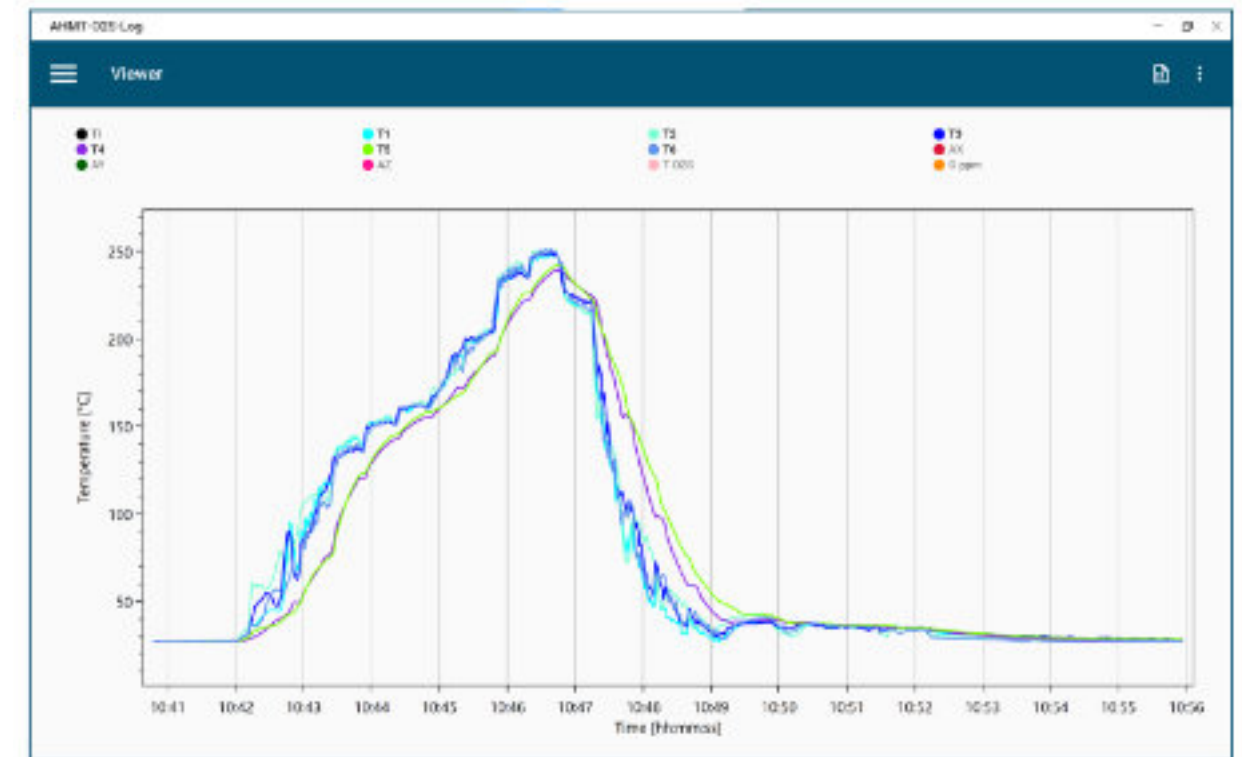


Individual dimensional adjustments of the housing and modular features to fulfill your requirements

Basic version with temperature, shock and tilt

Flexible upgrades such as atmospheric oxygen measurement and laser triangulation

TEMPERATURE

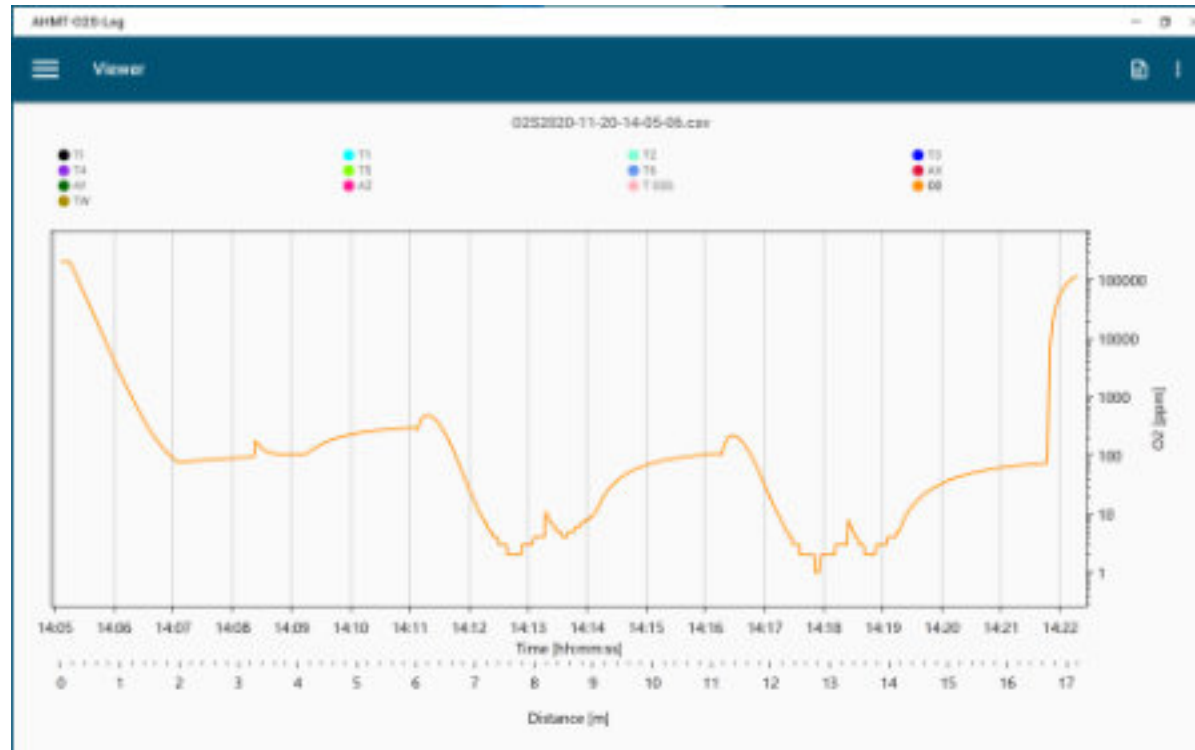


6 Channel measurement for temperature profiling

Individual carrier systems to compare process capability of different SMT lines

Integration of dummy PCBs to evaluate reflow settings

OXYGEN



Precise measurement from percentage to ppm level to recognize root cause of voiding

O2 profiling to detect location of leakages

Cross check of machine sensors to improve process reliability

TRANSPORT SETTINGS

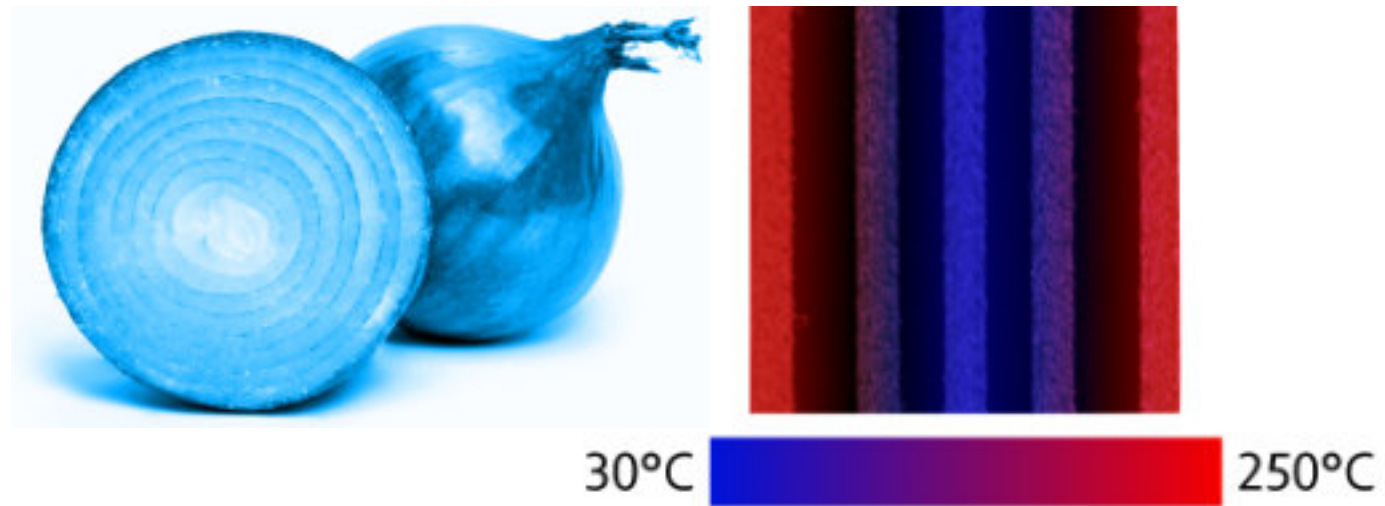


Transport chain distance measurement to improve parallelism

XYZ forces to assess process handover and machine vibrations

Tilt measurement to ensure a perfectly leveled process and detect contaminations

INNOVATIVE THERMAL MANAGEMENT



- Isolating** onion structure enables long operation (patent pending)
- Accelerated** cooldown for fast repetitive measurements
- Lightweight** housing for low interference with the soldering process

WIRELESS CONNECTION



- Touchless** operation control via software for highest comfort
- Live display** of the temperature profile for in-situ adjustments
- Automated** data transfer guarantees safe operation

USER FRIENDLY SOFTWARE



Three click software for simple data acquisition

Big data ready interface for individual data mining analysis

Dedicated post processing module for standard statistics

CUSTOMIZABLE HARDWARE



Individual adjustments of the housing to fulfill your requirements

Application specific carriers for repeatable measurements

Modular system for different transport widths

SPECIFICATIONS

General specification

Product group	Modular data logger for temperature, mechanical shock, tilt, oxygen, transport parallelism
Product name	Omnibus
Dimensions (standard)	188 mm (l), 29 mm (h), 130 mm (w)
Weight (standard)	545 g

Temperature measurement principle

Number of channels (standard)	6
Thermocouple connector type	Type K, Size “Micro”
Resolution	0.5° C
Accuracy	± 1.5° C
Measurement range of thermocouples	- 270 ... + 1300° C
Sample rate	1 ... 100 s
Number of internal temperature sensors	1
Measurement range internal sensors	+ 10 ... + 85° C
Resolution	0.1° C
Accuracy	± 1° C

Thermocouples

SPECIFICATIONS

Mechanical shock measurement	X, Y, Z direction
Measurement range	± 2 ... ±16 g
Sensitivity	± 2.5%
Resolution	5/1000 g
Tilt measurement	X, Y axis
Resolution	0.1°
Oxygen sensor	Zirconium oxide
Oxygen level	1 ppm ... 100%
Response time t ₉₀	20 s
Transport parallelism	Laser triangulation
Measurement range	10 mm
Resolution	2 µm

Standard battery specification

Battery technology	NiMH
Battery type	Rechargeable
Battery size	AAA
Number of batteries	12
Battery voltage total	15 V DC
Maximum internal temperature	85° C

RELATED PRODUCTS



The "ΔT-junkie" - Temperature Logger

Being the smallest 12 channel temperature logger for vacuum conduction and vapor phase ovens, the ΔT-junkie is an easy to use wireless data logging system for highest standards that will always be ready when you need it.



The "O2-Sniffer" - Oxygen Analyser

Optimized for vacuum conduction systems the O2-Sniffer is capable of measuring six temperature channels and O2-levels from 1 ppm to 100% to recognize root cause of voiding and leakages in the system.



The "Kraken" - Force Measurement

Specially designed for sintering processes, the 16 channel force and 4 channel temperature sensor will precisely show magnitude and distribution of sintering pressure to raise process data to a new level.

EVERYTHING IS POSSIBLE

CONTACT OUR TECH SUPPORT

We at AHMT are a solution driven team with a long time experience in production of electronics.

Make your inquiry today to discuss technical challenges and individual solutions with us.

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