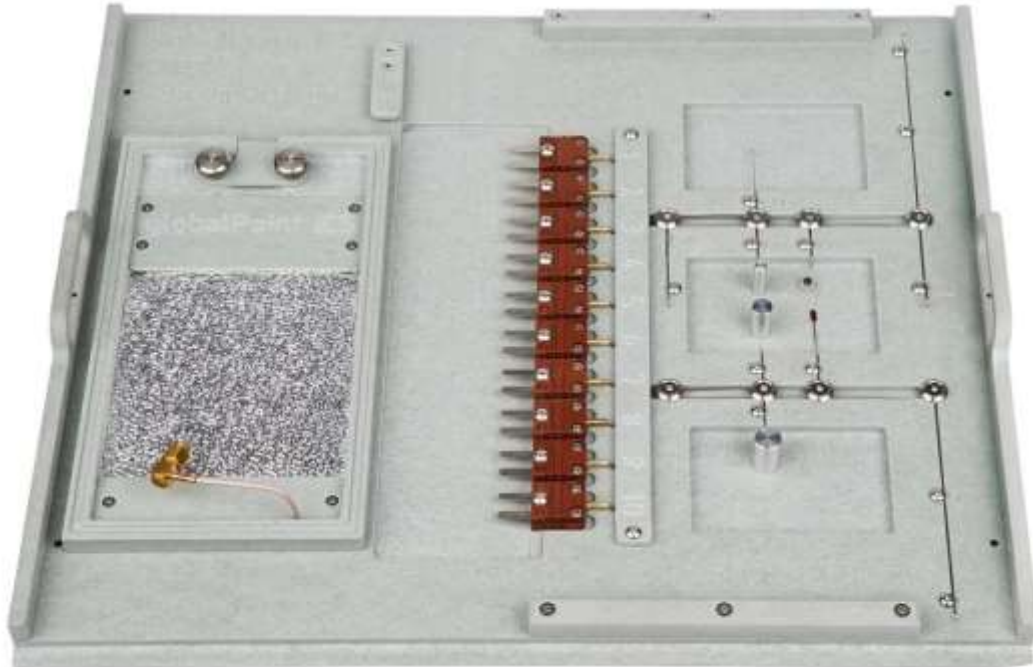


Solutions for thermal management ...



### *Measuring System Wave V5*

Specification **PTP®**

**P**rofessional **T**emperature **P**rofiler

## *Measuring Board - WAVE V5*

Prepared for taking up both PTP® electronics with real time data transmission via Bluetooth™

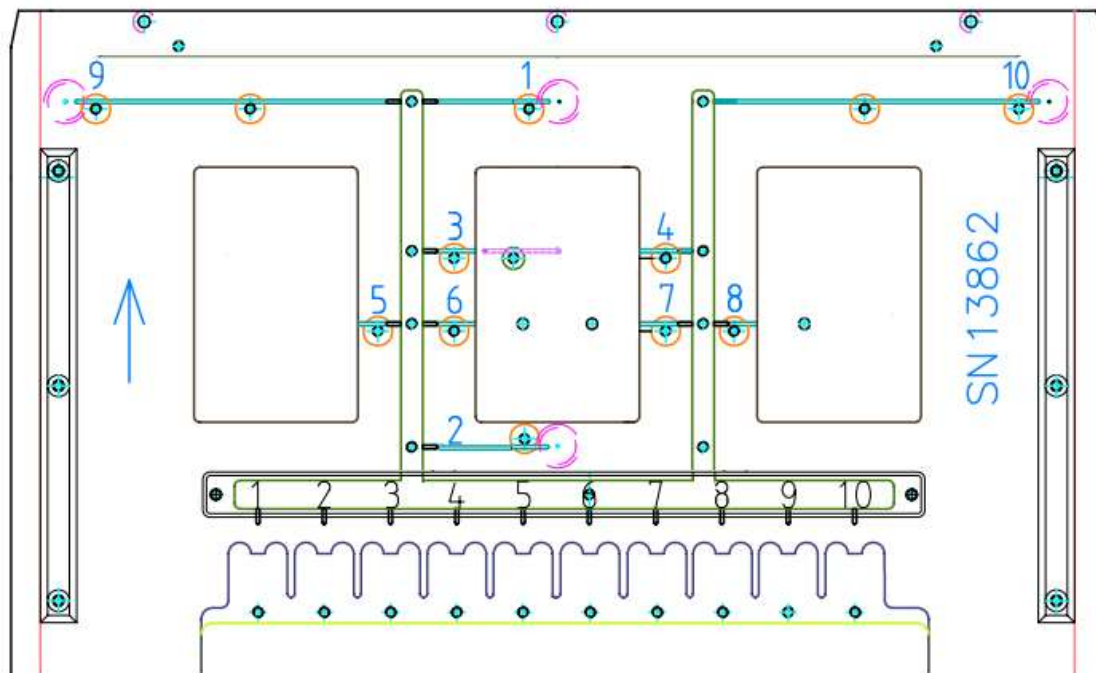
Maximum ambient temperature for 20 s [°C]	350
Long time ambient temperature [°C]	280-300
Size (standard board) [WxL]	300x330 mm
Max. height with thermo box / Contact-Screening-Option	<= 37 / 43 mm
Tolerance of thermal sensors [°C], K-Type, class 1, IEC 584	<= +-1.5
After Calibration [°C] (option)	<= +-0.2
Max. Temperature K-type plug connector green [°C]	220
Max. Temperature K-type thermal cable PTFE isolation [°C]	260

### RoHS

The PTP® electronics are produced according to the ROHS (Restriction of the use of certain Hazardous Substances in electrical and electronic equipment) directive.



## Sketch Measuring Board WAVE V5



### Oven Check Up

Only the thermocouples, which are necessary for the specific measurement aim, should be selected at the time. For the basic oven check-up should preferably be used all thermocouples 1 to 8. The measurement of the cross belt profile of a wave soldering plant is done with thermocouples 1, 9 and 10. Always it is recommended to determine the contact time (front edge and in the middle) and soldering bath temperature with sensors 1 and 2. In addition the transportation speed can be checked. Sensor 5 gets the atmospheric temperature, in order to have in the temperature distributions immediately an orientation over the temperature gradients at the different measuring points of the wave soldering plant. Sensors 3 and 4 are for preheating temperature / PCB below and above temperatures.

During the measurement with standards 6, 7 and 8 (measuring standards for device simulation) it is additionally meaningful to determine the atmosphere temperature of the soldering plant. In the process of a manufacturing shift the atmosphere temperature as a function of the system workload can vary strongly. These fluctuations can quite affect the results of measurement at the measuring standards. For all measurements (apart from 3, 4 and 6 to 8) it is recommended mostly to switch off the fluxing module. That's the best way to avoid solder sticking on the sheathed thermocouples.

### Contents of delivery Wave V5

- Measuring board with integrated modules:
  - 3 x cross profile / parallelism sensors
  - 1 x atmospheric temperature sensor
  - 1 x sensors transportation speed and temperature soldering bath
  - 2 x sensors preheating temperature / PCB below and above
  - 3 x measurement standards, sensors for device simulation
  - 1 x thermo-protection-cover for electronics
- Documentation (Manual and description of Measuring Pallet)
- Thermo-Protection for Electronics
- 8 K-type thermo cables for the connection contact-strip to electronics
- Aluminium-case for transportation (antistatic storage)
- 

### Option: Delivery of customized measuring boards on request!

#### Trademarks

Bluetooth™ is a trademark owned by the Bluetooth SIG, Inc,  
PTP® is a registered trademark owned by the globalPoint ICS GmbH.

