

- **Ambient temperature in wall mounting**
 - embedded temperature sensor
- **Option: input for remote temperature probes**
 - Up to 4 inputs for PT100 or PT1000
- **Communication:**
 - Modbus TCP, 6 simultaneous connections
 - Embedded Web Server, SNMP,
 - Send alarms email, SMTP protocol
- **Recording measurements option (Excel format)**
 - Graphics display on Web server
- **Powered by the Ethernet switch**
 - Power over Ethernet (PoE)
- **LCD display**
- **Applications:**
 - sterile room,
 - calibration laboratories,
 - Museums and exhibition halls,
 - Clean room, data center, warehouses,
 - air-conditioned room, ambient probes



SPAi60 is a multi channels thermometer for monitoring and traceability applications of controlled atmosphere rooms. This probe allows repatriation of measurements by Modbus / TCP or SNMP, to send alarm mail and recording measurement in Excel format.

SPECIFICATIONS

Measures:

Ambient temperature and up to 4 remote probes
automatic detection of sensor type (PT100 / PT1000).

Realization:

- Wall mounting (perforated plastic case).
- Conformal coating.
- protection (housing / terminals): IP20.

Front panel / configuration:

- 2 lines of 8 characters LCD display
- display temperature (local and optional remote probe)
- Three keys keyboard allowing:
the communication configuration (IP address and mask).
the measures adjustment (T° offset).

Serial link:

The device is also configurable via the serial link (USB cable - 3.5mm jack supplied separately).
The serial link allows also the firmware updating.

Communication:

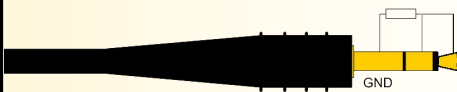
Ethernet 10/100 T Base (RJ45).
power over Ethernet (PoE) IEEE802.3af compliant.
Supported protocols: Modbus-TCP, SNMP, Web server.

Qualification test:

- Long term stability better than 0.1°C / year.

Remote probe: (Pt100 or Pt1000)

- remote temperature measurement
- cable length: up to 30 meters
- jack 3.5mm stereo plug



PoE injector:

- For switch not having the PoE functionality, we provide a PoE injector according to IEEE 802.3af



Version and order code:

- SPAi60 : Ambient temperature without remote probe
- SPAi60/4 : Ambient temperature with 4 probes inputs

Power supply by Ethernet (PoE)
(need a compatible switch or a PoE injector)

- Option : /Log : 1 month measures recording (2 minutes rate)
- /SMTP : Send alarm Email

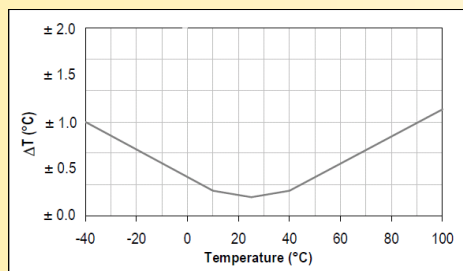
- SP1000 : remote probe (jack 3.5mm stereo plug)

MEASURE

Temperature (embedded sensor)

Measuring range -25+80 °C

Accuracy (vertical mounting recommended)



Re-
time T°
Repeatability
Linearity
Long-term stability

60 seconds typical (63%)
+/- 0.1°C
+/- 0.1°C
+/- 0.04°C / year

Température (remote sensor)

PT100 range -99°C....250°C (2 wires)

PT1000 range -99°C....250°C (2 wires)

automatic detection of sensor type

Accuracy ± 0.1°C (No cable length compensation)

Measure current < 2 mA

Cable length influence < 0.1°C / 10 meters

Response time ~ 200 ms / measure

measure rating 6 per second

POWER SUPPLY

power supply via PoE (power over Ethernet)

36 Vdc to 57 Vdc according to IEEE802.3af

COMMUNICATION

Ethernet 10/100 T Base (RJ45)

Supported protocol: Modbus-TCP, SNMP, Web server.

ENVIRONMENT

Operating temperature: -25 °C / +80 °C

Storage temperature: -40 °C / +85 °C

Humidity 85% non condensed

Weight ~ 100 gr.

Protection IP20

MTBF (MIL HDBK 217F) > 2 000 000 Hrs @ 25°C

Life time > 150 000 Hrs @ 30°C

Electromagnetic compatibility 2004/108/CE / Low Voltage Directive 2006/95/EC

Immunity standard for industrial environments
EN 61000-6-2Emission standard for industrial environments
EN 61000-6-4

EN 61000-4-2 ESD	EN 61000-4-8 AC MF
EN 61000-4-3 RF	EN 61000-4-9 pulse MF
EN 61000-4-4 EFT	EN 61000-4-11 AC dips
EN 61000-4-5 CWG	EN 61000-4-12 ring wave
EN 61000-4-6 RF	EN 61000-4-29 DC dips

EN 55011
group 1
class A

WIRING AND OUTLINE DIMENSIONS:

