



A-Box-T Signal converter

Technical Specifications

PT-100 2/3/4 W interface

4-20mA | -40 - 120°C

IP65 All weather enclosure

Optional USB contoller and EKO sense control software

PV system performance rating and testing methods require solar irradiance as an input parameter. For PV monitoring applications Solar Irradiance and PV module temperature are commonly measured. EKO universal 4-20mA and Modbus RS-485 RTU converters give full exibility to combine different type of sensors within a multi sensor network. Solar radiation sensors and temperature sensors can be easily integrated. Preserve or improve the sensor accuracy while complying to the output standards used in the industry.

The A-Box-T converts the output voltage of a PT-100 temperature sensor into a 4-20mA current output.

It can be used with all passive EKO sensors or any other temperature sensor with mV output whenever a 4-20mA signal is required.

For practical installation, the converter models are accommodated inside an IP65 aluminium box with

universal cable glands. It has robust input/output screw terminals, which can be easily connected to any cable and measurements system at the installation site. With the signal converter the sensor cable can be extended over a long distance without any signal loss or potential electromagnetic interference.

With the optional USB controller and EKO Sense software the converter settings and advanced sensor parameters (Temperature dependency correction / non-linearity correction) can be applied and verified.



| | A-Box-T |
|-----------------------|--------------------------|
| Output | Digital (4-20mA) |
| Dimensions mm | 64 (L) x 98 (W) x 36 (H) |
| Weight | 0.25 kg |
| Ingress protection IP | 65 |

| Options | A-Box-T |
|-----------------------------|---------|
| USB programming kit (MC-11) | USB-A |

| | MC-12 |
|------------------------------------|-------------------------|
| Output | Digital (4-20mA) |
| Input range 1 | - |
| Input range 2 | 2W, 3W, 4W PT-100 |
| Output range | 4-20mA = -40°C to 120°C |
| Resolution | < 0.1 °C |
| Impedance | - |
| Temperature response -20°C to 50°C | < 0.2 % |
| Response time 95% | < 1 Sec. |
| Non-linearity fll span | < 0.1 % |
| Operating temperature range | -40 - 80 °C |
| Power supply | 12 to 24 +/-10% VDC |
| Power consumption | 0.08 - 0.5 W |
| Dimensions mm | 45 (D) x 23 (H) |
| Weight | 0.03 kg |





| Ingress protection IP | 20 |
|-----------------------------|-------|
| Options | MC-12 |
| USB programming kit (MC-11) | USB-A |

Specifications are subject to change without further notice.