eCCT

Hot-Wire Bridge

- Dynamic temperature measurement in air flows
- Measurement accuracy: 1° C (temperature), up to 400 Hz (frequency)
- For the operation of HWP10/xx hot-wire probes



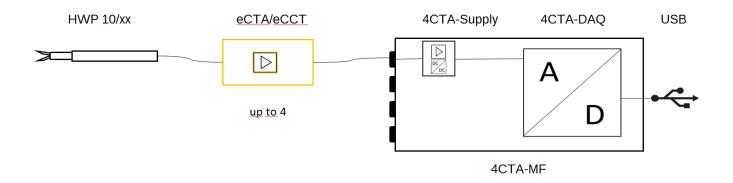
General Description

The eCCT is a full-fledged hot-wire bridge for dynamic temperature measurements in air flows which operates according to the constant current thermometry method.

The device is calibrated in the temperature range from 0°C to +150°C. The permitted temperature range for the shaft and cable is limited between -40°C and +80°C. The probe tip can be exposed to temperatures up to 250°C.

The eCCT is preconfigured for the hotwire probes HWP10/xx. Therefore, additional calibrations and adjustments are not necessary - the bridge is ready for use immediately. Due to precise calibration, the probe cable cannot be extended. The power supply and data acquisition are established by the 4CTA main unit which needs at least one option of 4CTA-Supply. This option needs to be ordered separately. Alternatively, the bridge can be operated using an sDAQ data acquisition system.

Components



Release: 31.07.2020

Technical Specifications

Suitable hot-wire probes	
HWP 10/xx Series	
Ambient conditions for hot-wire probes	
Fluid	Air, other non-corrosive gases possible no particles, no pollution, no explosive gases
Temperature range	-40° C 80° C complete probe -40° C 250° C probe tip
Humidity	Non-condensing
Accuracy	
Temperature	1° C
Frequency	up to 400 Hz
Connectors	
Power supply/signal	Binder 712, 7 pin
Hotwire	Binder 711, 2 pin
Ambient conditions for electronics	
Temperature	5° C40° C
Humidity	Non-condensing
Dimensions	
Case (h x w x d)	112 mm x 27 mm x 17 mm
Additional components required for usage	
4CTA with 4CTA-supply or sDAQ	
HWP 10/xx hot-wire probe	