More Precision



Ambient reference radiator TM-BR20AR-TIM

TM-BR20AR-TIM

- Ambient reference radiator with high emissivity, ideal for thermal imaging camera based fever screening applications
- Integrated 16-bit digital temperature sensor with 0.1 °C accuracy
- Mounting bracket adjustable for either ceiling or wall mounting
- Plug-and-play installation with 20 m cable and thermolMAGER TIM QVGA-HD-T100 suitable PIF-connector



Model	TM-BR20AR-TIM
Temperature range	30 °C 40 °C
Emissivity	0.95 ±0.02 (for 8 - 14 µm)
Temperature probe (integrated)	digital 16-bit temperature sensor
Accuracy of temperature probe	±0.1 °C (25 °C 50 °C) / drift: 0.0073 °C
Accuracy of TIM QVGA-HD-T100 with TM-BR20AR-TIM (T_{Amb} 18 °C 33 °C)	±0.5 °C (T _{Obj} 30 °C 40 °C)
Interface	5-pin connector fitting to PIF-connector of TIM QVGA-HD-T100 cameras
Dimensions	20 cm x 20 cm x 8.2 cm
Weight	2.5 kg (with mounting bracket / without cable)

Ambient reference radiator TM-BR20AR-TIM

with bracket for wall mount









Ambient reference radiator TM-BR20AR-TIM

with bracket for ceiling mount









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The TIMConnect software is referencing the entire IR image to the known temperature of the ambient reference which is placed inside the FOV.

Scope of supply TM-BR20AR-TIM

- Ambient reference radiator TM-BR20AR-TIM
- Mounting bracket
- = 20 m cable with PIF connector
- Instruction Manual

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Absolute temperature measurement accuracy

To improve the specified camera accuracy of the TIM QVGA-HD-T100 camera, a reference source with a high emissivity and a stable and known temperature must be positioned in the scene proximate to the subject to be scanned.

The TM-BR20AR-TIM ambient reference radiator is equipped with a temperature probe with \pm 0.1 °C accuracy.

Integrating this highly accurate reference signal to the TIMConnect software, reduces camera uncertainties resulting from device adjustment, ambient temperature drift and short term stability down to a system accuracy of \pm 0.5 °C.