

Thermography based skin allergic reaction recognition by convolutional neural networks — supplementary tables

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Parameter	Value
Spectrum recording range [LWIR]	8 μm to 14 μm
Resolution of the microbolometer array [LYNRED]	640 $\times$ 480 pixel
Pixel size of the microbolometer array	17 μm
Frame rate	30 Hz
Error of absolute skin temperature measurement	$< \pm 0.1\text{ }^{\circ}\text{C}$
Repeatability of temperature measurement	$< \pm 0.05\text{ }^{\circ}\text{C}$
Resolution of temperature measurement [NETD]	$< 35\text{ mK}$
Spatial resolution (Instantaneous Field of View - iFOV) [mm]	$< 0.3\text{ mm}$
Automatic temperature drift correction of IRFPA	Yes (hardware & software)
Lens (Germanium)	25 mm, F#1.4

Supplementary Table S1: Technical data of the infrared module (TIR-01A)

Parameter	Value
Black-body emitter dimensions	50 mm $\times$ 50 mm
Absolute (working) temperature range	+10 $^{\circ}\text{C}$ to +25 $^{\circ}\text{C}$
Relative (differential) temperature range	-15 $^{\circ}\text{C}$ to +50 $^{\circ}\text{C}$
Emissivity (e)	0.97 ± 0.01
Homogeneity of temperature distribution	$< 0.01\text{ }^{\circ}\text{C}$ or $0.4\% \Delta T$
Resolution	1 mK
Stability	$\pm 3\text{ mK}$
Temperature measurement uncertainty	$< 20\text{ mK}$

Supplementary Table S2: Technical data of the calibration black-body module (MBB-1A)