

# TMB1

MANUAL SYSTEM

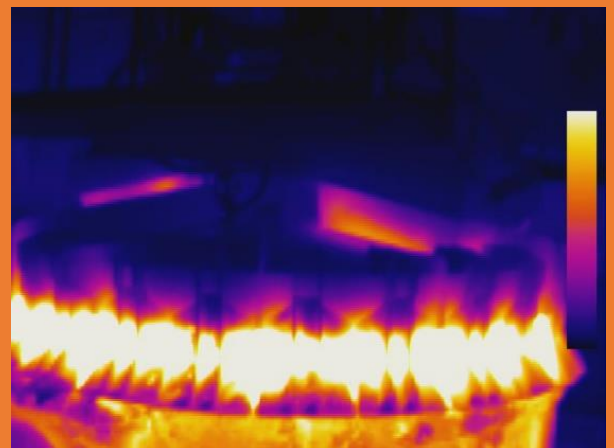
FOR MATERIALS

TEMPERATURE CONTROL

VERSION:

TMB1S – STANDARD RESOLUTION

TMB1L – LOW RESOLUTION



# MATERIAL TEMPERATURE CONTROL

Thermography is a non-destructive analysis technique that is based on the acquisition of infrared images. The thermographic method finds application in numerous sectors, including steel, construction, veterinary, chemical industry, cultural heritage, aeronautics, automotive and environmental protection.

The TMB1 cameras is a precise instrument for temperature detection on materials, it contains an extremely sensitive infrared detector a high-quality lens.

MODEL	TMB1L	TMB1S
TYPE	MOBILE	
TYPE OF READ	THERMO IMAGING	
UTILIZE	FOR MATERIAL	
RESOLUTION	LOW	STANDARD
PIXEL	80x80	380x288
THERMIC SENSIBILITY**	100mK	80mK
ACCURACY	±2 °C or ±2 %, whichever is greater	
FRAMERATE	50Hz	80 - 27Hz
RANGE OF TEMP.	-20...50°C / - 4...122°F	
WEB ASSISTANCE	OPTIONAL	
PHOTO*	YES	
RECORD*	YES	
CE	YES	
MANUAL	YES	
** LOWER IS, HIGHER IN THE SENSIBILITY		
*TO BE ATTENTION AT PRIVACY		

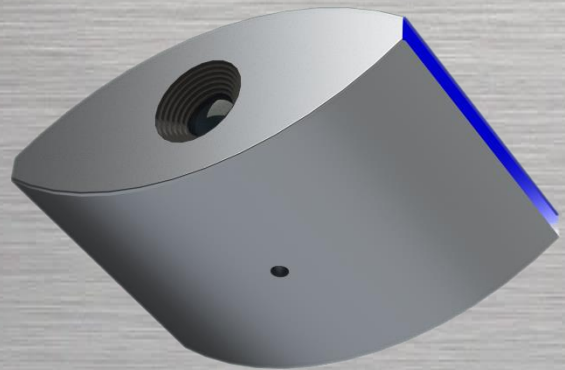


Table Emissivity for Metals

Material		Typical Emissivity			
Spectral response		1.0µm	1.6µm	5.1µm	18-14µm
Aluminium	<i>Not oxidized</i>	0.1-0.2	0.02-0.2	0.02-0.2	0.02-0.1
	<i>Polished</i>	0.1-0.2	0.02-0.1	0.02-0.1	0.02-0.1
	<i>Roughened</i>	0.2-0.8	0.2-0.6	0.1-0.4	0.1-0.3
	<i>Oxidized</i>	0.4	0.4	0.2-0.4	0.2-0.4
Brass	<i>Polished</i>	0.35	0.01-0.05	0.01-0.05	0.01-0.05
	<i>Roughened</i>	0.65	0.4	0.3	0.3
	<i>Oxidized</i>	0.6	0.6	0.5	0.5
Chopper	<i>Polished</i>	0.05	0.03	0.03	0.03
	<i>Roughened</i>	0.05-0.2	0.05-0.2	0.05-0.15	0.05-0.1
	<i>Oxidized</i>	0.2-0.8	0.2-0.9	0.5-0.8	0.4-0.8
Chrome		0.4	0.4	0.03-0.3	0.02-0.2
Gold		0.3	0.01-0.1	0.01-0.1	0.01-0.1
Haynes		0.5-0.9	0.6-0.9	0.3-0.8	0.3-0.8
Inconel	<i>Electro polished</i>	0.2-0.5	0.25	0.15	0.15
	<i>Sandblast</i>	0.3-0.4	0.3-0.6	0.3-0.6	0.3-0.6
	<i>Oxidized</i>	0.4-0.9	0.6-0.9	0.6-0.9	0.7-0.95
Iron	<i>Not oxidized</i>	0.35	0.1-0.3	0.05-0.25	0.05-0.2
	<i>Rusted</i>		0.6-0.9	0.5-0.8	0.5-0.7
	<i>Oxidized</i>	0.7-0.9	0.5-0.9	0.6-0.9	0.5-0.9
	<i>Forged, blunt</i>	0.9	0.9	0.9	0.9
	<i>Molten</i>	0.35	0.4-0.6		
Iron, Casted	<i>Not Oxidized</i>	0.35	0.3	0.25	0.2
	<i>Oxidized</i>	0.9	0.7-0.9	0.65-0.95	0.6-0.95