# DATA SHEET

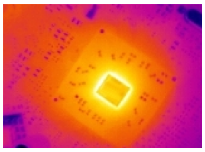
## Infrared Camera Thermo-Cam with USB-Connection

Characteristics

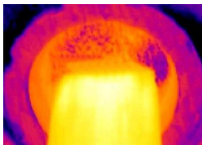
- **High Accuracy within Temperature Range of -20 up to +900°C**
- **Compact Design – Easy to Use**
- **Infrarot Detector with 160 x 120 px and thermal sensitivity of 0,08K**
- **Exchangeable lenses with 6° FOV, 23° FOV or 48° FOV**
- **Real-Time thermography with 120Hz frame rate**
- **Power Supply via USB - Interface**
- **Windows XP / Vista / Windows 7–Software „Thermo-Cam“**
- **Analogue In– and Output, Trigger–Interface**
- **Leightweight (250g) and Rugged (IP65)**

Typical Applications

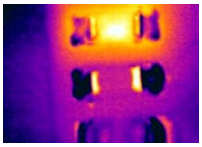
- **R&D Electronic**



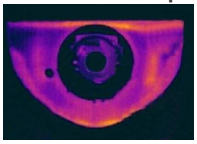
- **Process Control Extrusion**



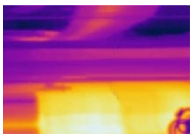
- **R&D Electronic Devices**



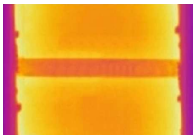
- **R&D Mechanical Components**



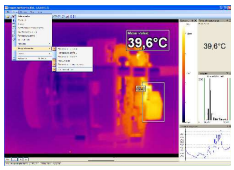
- **Process Control of Calendering**



- **Production of Solar Panels**

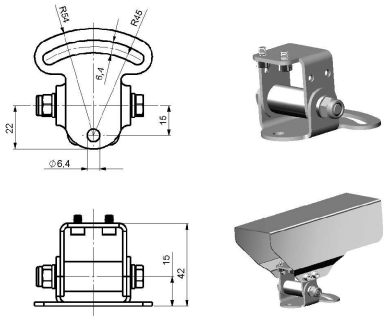


### Software Thermo–Cam :




- Display of the thermal image in real time (120Hz) with recording function (video, snap shot)
- Complete set up of parameters and remote control of the camera
- Detailed analysis of fast thermodynamic processes

### Accessories:




Mouting Base with Protective Housing



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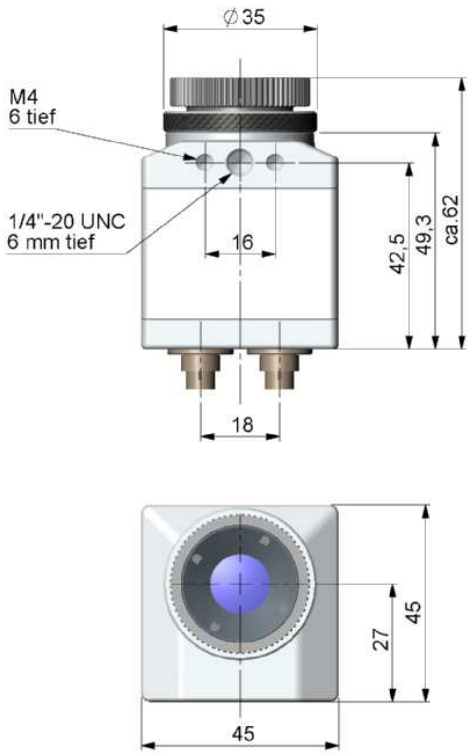
## Infrared Camera Thermo-Cam with USB-Connection

### Technical Data:

| General Specifications | |
|---|---|
| Protection Rating | IP65 |
| Operating Temp. | 0° C to +50° C |
| Storage Temp. | -40° C to +70° C |
| Relative Humidity< | 20 – 80%, non condensing |
| Shock | 25G, IEC 68-2-29 |
| Vibration | 2G, IEC 68-2-6 |
| Weight | 250g, incl. Lens |
| **Electrical Specifications** | |
| Output | USB 2.0 |
| Power Supply | USB powered |
| Process Interface (electrically isolated) | 0 – 10V output<br>0 – 10V input<br>Trigger input |
| Tripod Mount | ¼ - 20 UNC |
| **Measurement Specifications** | |
| Temperature Range | -20° C to +100° C<br>0° C to +250° C<br>+150° C to +900° C |
| Detector | uncooled FPA – Micro Bolometer<br>35 x 35 µm |
| Thermal Sensivity (NETD) | 0,08K with 23° FOV/F = 0,7<br>0,3K with 6° FOV/F = 1,6<br>0,1K with 48° FOV/F = 1 |
| Refresh Rate | 120Hz |
| Spectral Range | 7,5 – 13µm |
| Optical Resolution | 160 x 120 pixel |
| System Accuracy | ±2% or ±2° C |
| Resolution (Display) | 0,1° C |
| Lenses | 48° x 37° / f = 4,5mm<br>23° x 17° / f = 10mm<br>6° x 5° / f = 35,5mm |
| Measurement Modes | Flexible spot with crosshair marking, fixed measurement field with automatic diaply of maximum-, minimum- or average value |
| Color Palettes | Iron, rainbob, black and white, black and white inverted |
| Set up Controls (via menu) | Measurement modes, full automatic, manual, color palettes, emissivity, file management, date/time, °C / °F, language |
| Emissivity | 0,10 – 1,00 adjustable |

### Dimensions:




### Scope of Delievery:

- **Thermo–Cam incl. a selectable Lens**
- **Stand**
- **Transport Case**
- **Operating Manual**
- **USB–Cable**
- **Process–Interface–Plug (5–pole)**
- **Software Thermo–Cam: for Real Time Processing and Analyzing of thermal Images**



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