

Advanced Portable Infrared Thermometers for demanding Industrial applications

### **IRtech** Infrared Technology

- Temperature range up to 1800°C
- Optical resolution up to 300:1  
8-14μm, 1μm, 1.6μm  
Spectral response
- Dual laser pointer
- Telescope sighting
- Large LCD display  
3 colors backlight
- Emissivity settings
- Rechargeable batteries
- USB interface with  
IR Portable Windows software
- Datalogger up to 2000 measures
- Max, Min, Alarms audible features



Each body, at temperatures above the absolute zero (-273°C or 0K), emits energy as electromagnetic radiation. When temperature rises, the intensity of this infrared energy increases. The temperature of the body surface can therefore be determined by measuring the intensity of this energy in a small spectral band: the infrared region. The instruments used to measure this energy and to calculate the related temperature are called infrared thermometers or non-contact thermometers.

Temperature measurements of a liquid or gaseous compound have been successfully made with thermoelectric or expansion thermometers, thanks to the good thermal exchange of the sensor with the fluid. With solid bodies, a good thermal exchange is difficult to be obtained and an additional measuring error should be considered. When the target is moving or is electrically hazardous, a contact temperature measurement can't be made. Non-contact IR temperature measurement could be the only solution to the above application problems.

Typical application of **IRtech** portable thermometers is to control temperature where an increase of its value means a possible machine wearing, aging, faulting, etc.

### Models

Models	Pro 1100	Pro 1330	Pro 2200
Temperature range	0 - 1300 °C	385 - 1600 °C	650 - 1800 °C
Accuracy	±1% or ±2°C *	±(0,3% rdg or ±1°C) *	±(0,3% rdg or ±1°C) *
Repeatability	±0,5% or ±1°C *	±(0,1% or ±1°C) *	±(0,1% or ±1°C) *
D:S target ratio	120:1	300:1	300:1
Response time	300 mS	100 mS	100 mS
Spectral response	8-14 µm	1,6 µm	1 µm
Laser pointer	single	double	double
Focus point	100mm @ 12m	12mm @ 3,6m	12mm @ 3,6m

\* whichever is greater

#### Storage temperature:

-20°C to +60°C ( no battery )

#### Dimensions and weight:

234mm x 203 mm x 60 mm - 990 g nett

#### Memory:

2000 measurements

#### LCD Backlight:

3 colors alarm

### Common specifications

#### Emissivity:

Pre-set to 0,95. Adjustable 0,100 - 1,000

#### Working temperature:

0 to +50°C / 10-95% RH non condensing

#### Digital interface:

USB

#### Battery:

NiMH rechargeable battery

#### Battery life:

5 hours with laser and backlight on  
25 hours without laser and backlight

#### Laser:

Class II (<1mW) single or double

#### Sighting scope:

Adjustable standard

#### Functions:

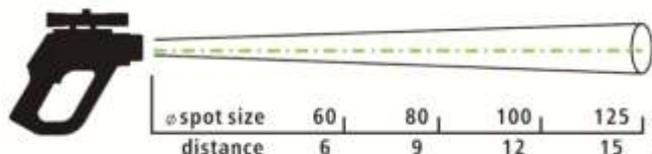
Max, Min and Scan/Hold

#### Alarms:

High and Low with audible and visible

### Optical specifications

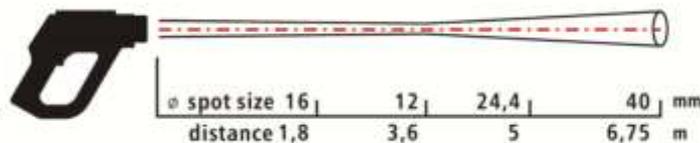
Pro 1100



D:S = 120:1

Pro 1330

Pro 2200



D:S = 300:1



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



**UK Office**

**Keison Products,**

**P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.**

**Tel: +44 (0)330 088 0560**

**Fax: +44 (0)1245 808399**

**Email: [sales@keison.co.uk](mailto:sales@keison.co.uk)**

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.