

# MT16

## DIGITAL CONTACT "CUM" NON CONTACT TYPE INFRARED THERMOMETER WITH USB PC INTERFACE



### INTRODUCTION

This is capable of non-contact (infrared) temperature measurements at the touch of a button.

The built-in laser pointer increases target accuracy while the backlight LCD and handy push-buttons combine for convenient, ergonomic operation.

The Non-contact Infrared Thermometers can be used to measure the temperature of objects' surface that is improper to be measured by traditional (contact) thermometer (such as moving object, the surface with electricity current or the objects which are uneasy to be touched.)

### FEATURES

- Rapid detection function
- Precise non-contact measurements
- Dual laser sighting for indicating the diameter of target whose temperature is being measured
- Unique flat surface, modern housing design
- Automatic Data Hold
- Emissivity Digitally adjustable from 0.10 to 1.0
- MAX/MIN/AVG/DIF temperature displays
- Backlight LCD display
- Automatic selection range and Display Resolution 0.1°C(0.1°F)
- Trigger lock
- Set high and low alarms
- Data logger (LOG)
- Transmit data to PC with USB.

### Distance & Spot Size

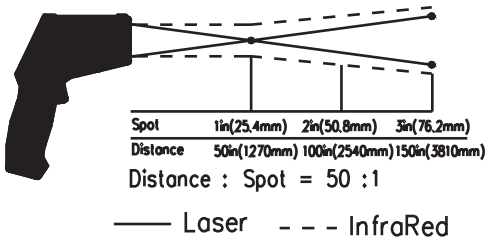
As the distance (D) from the object increases, the spot size (S)

of the area measured by the unit becomes larger. The relationship between distance and spot size for each unit

is listed below.

The focal point for each unit is 914mm (36").

The spot sizes indicate 90% encircled energy.



### SPECIFICATIONS

<b>TK Temperature range</b>	-50 to 1370 °C (-58 °F ~ 2498 °F)	
Accuracy	-50 ~ 1000 °C	± 1.5% of reading + 3 °C (± 5 °F)
	1000 ~ 1370 °C	± 1.5% of reading + 2 °C (± 3.6 °F)
Display resolution	0.1 °C (0.1 °F)	<1000
	1°C (1 °F)	>1000
Repeatability	-50 ~ 1370 °C (-58 ~ 2498 °F) : ± 1.5% of reading	
<b>IR Temperature</b>	<b>Range</b>	<b>D : S</b>
	-50 to 1800 °C (-58 °F ~ 3272 °F)	50:1
Display resolution	0.1 °C (0.1 °F)	<1000
	1 °F	>1000

### Accuracy for targets:

Assumes ambient operating temperature of 23 to 25 °C (73 to 77 °F)		
	-50 ~ 20 °C (-58 °F ~ -68 °F)	± 3.0 °C (5.4 °F)
	20 °C ~ 500 °C (68 °F ~ 932 °C)	± 1.0% ± 1.0 °C (1.8 °F)
	500 °C ~ 1000 °C (932 °F ~ 1832 °F)	± 1.5%
	1000 °C ~ 1800 °C (1832 °F ~ 3272 °F)	± 2.0%
Repeatability	-50 ~ 20 °C (-58 ~ 68 °F) :	± 1.5 °C (2.7 °F)
	20 ~ 1000 °C (68 ~ 1832 °F) :	± 0.5% or ± 0.5 °C (0.9 °F)
	1000 ~ 1800 °C (1832 ~ 3272 °F) :	± 1.0%

Response time	150ms
Spectral response	8 ~ 14um
Emissivity	Digitally adjustable from 0.10 to 1.0
Over range indication	LCD will show "----"
Polarity	Automatic (no indication for positive polarity); Minus (-) sign for negative polarity
Diode laser	output <1mW
Wavelength	630~670nm,
Class 2 laser product	
Operating temp.	0 to 50 °C (32 to 122 °F)
Storage temp.	-10 to 60 °C (14 to 140 °F)
Relative humidity	10% ~ 90% RH operating, <80% RH storage
Power supply	9V battery, NEDA 1604A or IEC 6LR61, or equivalent
Safety	"CE" Comply with EMC

\*Technical Specifications & Appearance are subject to change without prior notice

## THE QUALITY LEADER

w.e.f. 10/07/2014