

## Common Specifications

**Spectral Response:** 8-14  $\mu\text{m}$

**Display Resolution:**

PRO/PRO+/PRO++: 0.1°F up to 199.9°F. 1°F otherwise.

PRO/PRO+: 0.2°F from -22 to 32°F

Xtreme: 0.1°F

**Response Time:** 500 ms, 95% response

**Adjustable Emissivity:** from 0.20 to 1.00 (preset to 0.95)

**Auto Power Off:** Automatic after 30 sec of no operation.

**Accuracy IR Channel:**

PRO: from 32°F to 158°F :  $\pm 1.8^\circ\text{F}$

PRO: from 158°C to f.s. :  $\pm 1.5\%$  of the reading or  $\pm 2.7^\circ\text{F}$

Xtreme: from 32°C to f.s. :  $\pm 1\%$  of the reading or  $\pm 1.8^\circ\text{F}$

All models: from -22°F to 32°F :  $\pm (1.8^\circ\text{F} + 0.07^\circ\text{F}/^\circ\text{F})$

**Repeatability IR Channel:**  $\pm 0.5\%$  of the reading or  $\pm 1.3^\circ\text{F}$  from 32°F

**External Channel:** Resistance high accuracy platinum Pt1000

**External Channel Range:** from -22°F to 930°F

**External Channel Accuracy:** 0.2% of reading or 0.36°F

**Power Supply:** 9V alkaline or optional rechargeable battery kit

**Battery Life:** 40 h (back light and laser Off) - 20 h (On)

**Operative Temperature:** 32 to +120°F

10-95% RH non condensing up to 86°F

**Storage Temperature:** -4 to +150°F without battery

**Tripod mounting:** 6.35 mm ( 1/4" ) 20 UNC threading

**Dimensions - Weight:** 5.5x3.5x1.5 in (140x90x38 mm) - 6 oz nett

**Typical Working Distance** (General information. No restriction for longer distance):

Optics 15:1 up to 10ft, Optics 20:1 up to 12ft, Optics 35:1 up to 16ft,

Optics 50:1 up to 30ft.



## IRtec MicroRay PRO™

## IRtec MicroRay Xtreme™

**The New Innovative Compact  
Low Cost Professional Infrared Thermometer**



*Professional for Industrial  
Applications, Affordable for  
Domestic Use!*

### MicroRay PRO

-22°F to +930°F

Optics 15:1

### MicroRay Xtreme++

-22 to +1830°F

Optics 50:1

TTA True Target Aiming

Internal Memory

Real Time Clock

USB Cable and Windows™

Software

Comfortable: Pistol Grip

Easy to Use:

Just a "Click" to Measure

Quick: Immediate Response

Laser Sighting: Ultra Sharp

Display: Large Backlight LCD

Built-in Contact Probe

Adjustable Emissivity

Max, Min, Diff Reading

°C/°F Selectable

Compact: 5.5x3.5x1.5 in



**IP54  
Washable**

*All descriptions are related to full options instrument. See following pages for the different configurations and models*

## IR Logman 2006 Software

Logman Software is compatible with Windows 98/XP and can download data with USB cable. The USB port is available only on MicroRay Xtreme. You can download up to 64 tests or run on-line logging storing data directly on PC. You can view, print, graph and export an Excel file.

## Accessories

- |          |  |
|----------|--|
| EE880075 | Rigid ABS case                               |
| EE880070 | Soft pouch with belt clip                    |
| EE880069 | Soft Vinyl case                              |
| EE420375 | USB cable + IR Logman 2006 Windows™ software |

### Built-in 2.5" Compact Probe

F2125000 Penetration tip

### Built-in 5" Probe

F2123000 Penetration tip

F2124000 Immersion tip

F2122000 Ambient Air tip

### Remote 5" Probe with 3.3ft Wire Extension

F2126000 Penetration tip

F2127000 Contact spring loaded tip

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**The  
Smart Choice**

**For detailed information  
please visit our web site:**

**einstrumentsgroup.com**

# IRtec MicroRay PRO



The MicroRay PRO infrared (IR) thermometer is the ideal tool to diagnose, inspect, and check the performance of any critical temperatures for your applications. With the advantage of using non contact technology you can measure a moving, obstructed, or hot object very easily and at a comfortable distance. It is the perfect tool for an endless number of processes & applications, whether in your home, garage, workshop, office, automobile, kitchen, and so much more.

**IRtec MicroRay**  
**Measuring Range**  
**Optics**  
**Laser Sighting**  
**Accuracy\***  
**Contact Probe Socket**  
**Emissivity**

PRO	PRO+	PRO++
-22 to 930°F	-22 to 930°F	-22 to 1110°F
15:1	15:1	20:1
Standard	Standard	Standard
±1.5%rdg or±2.7°F	±1.5% rdg or±2.7°F	±1.5% rdg or±2.7°F
None	Standard	Standard
Preset 0.95	Preset 0.95	Preset 0.95
Adj 0.20/1.00	Adj 0.20/1.00	Adj 0.20/1.00
Standard	Standard	Standard
Visual	Visual	Visual+Audible
Standard	Standard	Standard
Last reading	Last reading	Last reading

**MAX/MIN/DIF**  
**Hi/Low Alarms**  
**Display Backlight**  
**HOLD**

\* extended accuracy declaration and additional parameters in last page.

## Built-In Contact Probe - RTD

The MicroRay PRO +, PRO++, and all Xtreme models are equipped with a connection for contact measurement. The available temperature probes include a Contact, Immersion, Penetration, & Ambient Air. One compact probe can actually be stored inside the unit for easy access. Longer probes are available if needed and provided with or without a wire connection. See last page for details.

## Laser Sighting - US Ultra Sharp

All MicroRay models are equipped with a Class II Laser for aiming purposes. The offset laser sighting will allow you to identify the approx. center of the target being measured. The Ultra Sharp definition of laser makes it easy to read outdoors as well.

## 9V Battery

Easily replaceable standard 9V battery is provided with the unit. A kit is also available for rechargeable battery and external charger.

## Tripod mounting

Standard photographic tripod thread is available for accurate and long term measurements.

## Ordering Code

Each Instrument includes a 9V battery and instruction manual.

Cat.1186-1 MicroRay PRO  
 Cat.1186-2 MicroRay PRO+  
 Cat.1186-4 MicroRay PRO++

# IRtec MicroRay Xtreme



The MicroRay Xtreme is the most advanced compact infrared (IR) thermometer available on the market used to diagnose, inspect, and check the performance of any critical temperatures for your applications. With its superior optics, it allows for easy & more accurate measurements of smaller targets at longer distances. The unit can keep up to 64 different measurements in its internal memory, which includes a Real-Time clock for any documenting procedure. A Built-In interface allows you to connect the unit to any laptop or PC with an optional USB cable to download measurements using LogMan Data Manager Windows Software.

**IRtec MicroRay**  
**Measuring Range**  
**Optics**  
**Laser Sighting**  
**Accuracy\***  
**Contact Probe Socket**  
**Emissivity**

Xtreme	Xtreme+	Xtreme++
-22 to 1400°F	-22 to 1830°F	-22 to 1830°F
35:1	50:1	50:1
Standard	Standard	Standard TTA
±1% rdg or ±1.8°F	±1% rdg or ±1.8°F	±1% rdg or ±1.8°F
Standard	Standard	Standard
Preset 0.95	Preset 0.95	Preset 0.95
Adj 0.20/1.00	Adj 0.20/1.00	Adj 0.20/1.00
Std	Std	Std
Visual+Audible	Visual+Audible	Visual+Audible
Standard	Standard	Standard
Last reading+	Last reading	Last reading
64 mem+USB	64 mem+USB	64 mem+USB
real-time clock	real-time clock	real-time clock

**MAX/MIN/DIF/AVG**  
**HI/LO Alarms**  
**Display Backlight**  
**Memory**

\* extended accuracy declaration and additional parameters in last page.

## Emissivity

The infrared energy emitted by a surface differs according to its composition and physical condition. The parameter, used to characterize the object surface, is called emissivity.

The preset value 0.95 is valid on most common applications with few exception like shiny metals. Emissivity can also be adjusted from 0.2 to 1. You can find some guidelines on our web site. On Xtreme models you can adjust emissivity automatically using contact probe.

## TTA / True Target Aiming

Using the most advanced technology, the MicroRay

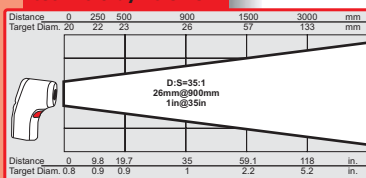
Xtreme++ has a laser sighting with a reflex system of the beam passing through the center of the lens, which grants the best possible accuracy when aiming at a distance.

## Memory

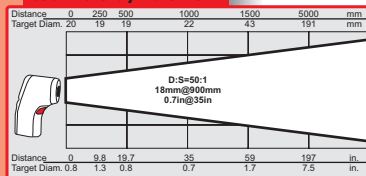
Xtreme models can store up to 64 tests with date and Time using the internal real time clock. Datalogging can be manual or automatic with settable sampling time.

## Recommended Target Ranges

### IRtec Microray Xtreme



### IRtec Microray Xtreme+ IRtec Microray Xtreme++



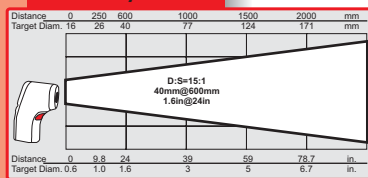
## Ordering Code

Each Instrument includes a wrist strap, 9V battery and instruction manual.

Cat.1188-1 MicroRay Xtreme  
 Cat.1188-2 MicroRay Xtreme+  
 Cat.1188-4 MicroRay Xtreme++

## Recommended Target Ranges

### IRtec Microray PRO IRtec Microray PRO+



### IRtec Microray PRO++

