

# LAND

# Q series



## Rugged, Compact, Accurate. High Temperature Spot Thermometers

**The Land IQ series are compact, rugged, industrial thermometers designed to meet the needs of high temperature process control applications.**

IQ series thermometers feature an all metal design with integrated water cooling, air purge and screw terminal connections to facilitate simple and cost effective operation.

Thermometers can be configured using any permutation of four wavelengths, four feature levels and four focus distances to suit your requirements.

### Accessories

- Tripod Mount
- Dual & Single Axis mounting brackets
- Power Supply
- Digital Indicator
- PC Setup Software (free issue with Enhanced and Premium versions only)

### Features & Benefits

- 4 temperature/wavelength variants - *Configurable to suit your application*
- Rugged all metal design - *Suitable for harsh industrial environments*
- Integrated air purge and water-cooling - *Protects instrument under all conditions*
- Plug and Play four wire operation - *Zero configuration*
- Advanced signal processing - *Simplifies complex process control applications*
- Peer-to-peer & multidrop RS485 digital interface - *Digital process control*
- 2 x Alarm Relays - *Protect your plant and instrument*
- Compact Size - *Ideal for constrained measurement positions*
- Simple screw terminal connection - *Simplifies installation. Use existing wiring.*

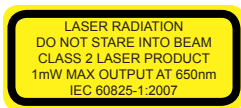
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For a full list of international offices, please visit [www.landinst.com](http://www.landinst.com)

### Non-Contact Temperature Measurement Solutions



An **AMETEK** Company

Applies in the UK

Applies in the USA

**George R. Peters Associates** ENGINEERING SALES REPRESENTATIVES

650 E. Big Beaver • Suite C • Troy, MI 48083  
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## Specifications

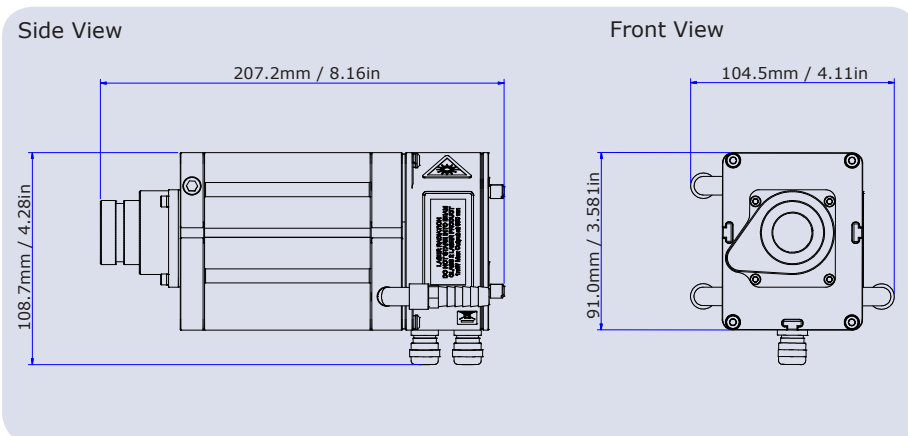
| Model Range         | IQ1                                  | IQ2                            | IQ5                            | IQR                             |
|---------------------|--------------------------------------|--------------------------------|--------------------------------|---------------------------------|
| Temperature Range   | 1022 to 3182°F<br>550 to 1750°C      | 482 to 2372°F<br>250 to 1300°C | 392 to 2012°F<br>200 to 1100°C | 1292 to 3182°F<br>700 to 1750°C |
| Spectral Response   | 1μm                                  | 1.6μm                          | 5μm                            | 1μm Ratio                       |
| Field of View (90%) | 110:1                                | 110:1                          | 60:1                           | 110:1                           |
| Response Time       | 10ms                                 | 10ms                           | 50ms                           | 10ms                            |
| Accuracy            | 0.3%+1°C                             | 2°C                            | 0.35%+1°C                      | 0.6%+1.5°C                      |
| Sighting            | Laser defining Optical Axis (Option) |                                |                                |                                 |
| Ambient Limit       | 32 to 158°F (Operating)              |                                |                                |                                 |
| EMC                 | EN 61326                             |                                |                                |                                 |
| Sealing             | IP65 / NEMA 4X                       |                                |                                |                                 |
| Power Supply        | 18 to 30Vdc                          |                                |                                |                                 |

## Ordering Information

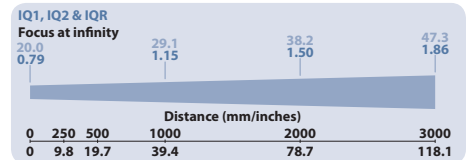
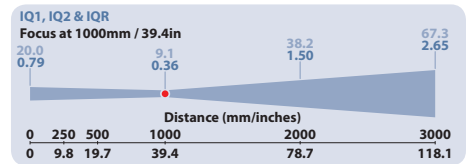
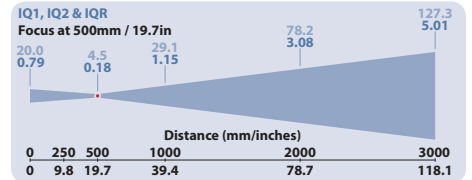
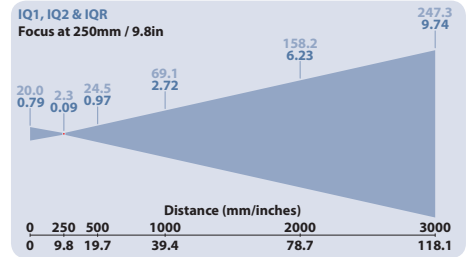
|                    |                   |           |              |          |                       |               |
|--------------------|-------------------|-----------|--------------|----------|-----------------------|---------------|
| <b>IQ</b>          | <b>1</b>          | <b>S</b>  | <b>500</b>   |          |                       |               |
| <b>Series Name</b> | <b>Wavelength</b> |           | <b>Model</b> |          | <b>Focus Distance</b> |               |
|                    | 1                 | 1.0μm     | B            | Basic    | 250                   | 250mm / 10in  |
|                    | 2                 | 1.6μm     | S            | Standard | 500                   | 500mm / 20in  |
|                    | 5                 | 5.0μm     | E            | Enhanced | 1000                  | 1000mm / 40in |
|                    | R                 | 1μm Ratio | P            | Premium  | Infinity              | Infinity      |

| Feature  | B | S | E | P |
|--|---|---|---|---|
| Rugged All Metal Design (IP65)                   | • | • | • | • |
| Integrated Air Purge And Water Cooling           | • | • | • | • |
| Simple Screw Terminal Connection                 | • | • | • | • |
| Emissivity Compensated 4-20Ma Output             | • | • | • | • |
| Adjustable Emissivity (0.1 To 1.0)               | • | • | • | • |
| Factory Selectable Focus                         | • | • | • | • |
| Laser Alignment                                  |   | • | • | • |
| Peer-To-Peer & Multidrop RS485 Digital Interface |   |   | • | • |
| Advanced Signal Processing                       |   |   | • | • |
| 2 x Alarm Relays                                 |   |   | • | • |
| User Selectable Focus                            |   |   |   | • |

## Dimensions



## IQ1, IQ2, IQR FOV



## IQ5 FOV

