



## RT8A... Rugged, high performance infrared thermometers

The new Land RT8A infrared thermometers provide cost effective, accurate and reliable temperature measurement of moving materials, webs or inaccessible objects without contact.

The thermometer is housed in a rugged sealed body which can be integrated directly into a simple two-wire 4 to 20mA current measuring, monitoring or control loop.

RT8A is easy to install with a choice of mounting configurations available from the System 4 range of

Land RT8A offers the following features:

- Adjustable response time
- High accuracy and repeatability
- Long term, drift-free measurement
- Industry standard 4 to 20mA output
- Rugged, sealed enclosure for industrial use
- Wide range of mounting accessories

mounting accessories which provide optional cooling and lens purging facilities for hostile operating environments.

Measuring product temperature without contact can improve quality, conserve energy, and optimize production rates. This cost effective stand-alone thermometer can be readily installed in primary OEM and end-user applications in a wide range of industries such as asphalt, mineral processing, glass, food, paper, converting, plastics, printing and textiles.

Benefits:

- No contamination, interference or damage to the process or material
- Accurate, reliable and stable temperature measurement to aid product quality control
- Save energy and heating costs
- Maximize production rates

# LAND

instruments international

Infrared Temperature Measurement

see [www.landinst.com](http://www.landinst.com) for full contact details

Land Instruments International • Dronfield S18 1DJ • England • Tel: (01246) 417691 • Fax: (01246) 410585  
Email: [infrared.sales@landinst.com](mailto:infrared.sales@landinst.com) • Internet: [www.landinst.com](http://www.landinst.com)

Land Instruments International • 10 Friends Lane • Newtown, PA 18940-1804 • U.S.A. • Tel: (215) 504-8000  
Fax: (215) 504-0879 • Email: [irsales@landinstruments.net](mailto:irsales@landinstruments.net) • Internet: [www.landinstruments.net](http://www.landinstruments.net)

**France**  
Land Instruments Sarl  
Tel: (1) 34 62 05 45  
Email: [commercial@landinst.fr](mailto:commercial@landinst.fr)

**Japan**  
Land Instruments Ltd  
Tel: 06 6330 5153  
Email: [info@landinst.jp](mailto:info@landinst.jp)

**Germany**  
Land Instruments GmbH  
Tel: 02171/7673-0  
Email: [infrarot@landinst.de](mailto:infrarot@landinst.de)

**Mexico**  
Land Instruments International  
Tel: 52 55 5281 1165  
Email: [ventas@landinstruments.net](mailto:ventas@landinstruments.net)

**India**  
Land DEL Infrared Pvt. Ltd  
Tel: 022 5668 2072  
Email: [sales.mumbai@landdel.com](mailto:sales.mumbai@landdel.com)

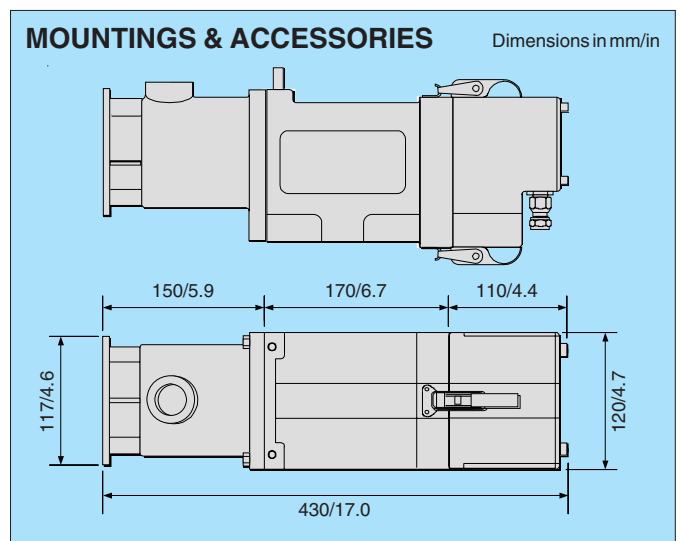
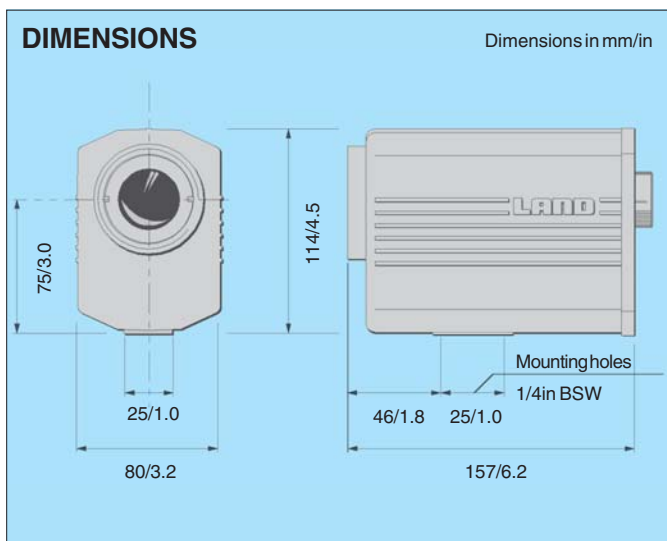
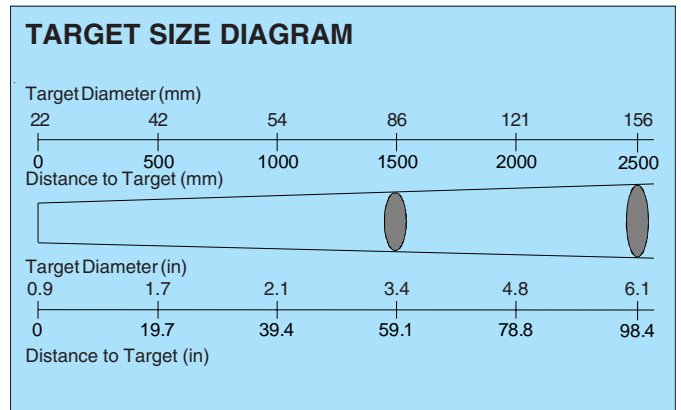
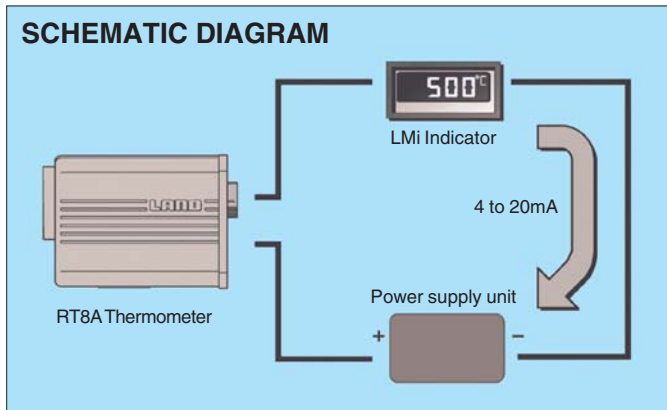
**Spain**  
Land Instruments International  
Tel: 91 630 0791  
Email: [land-infrared@landinst.es](mailto:land-infrared@landinst.es)

**Italy**  
Land Instruments Srl  
Tel: 02/99040423  
Email: [info@landinst.it](mailto:info@landinst.it)

## PROTECTION AND MOUNTING ACCESSORIES

A range of optional accessories is available to securely install and protect the thermometer at the optimum position on the process.

For further details refer to the System 4 Mountings and Accessories brochure - or browse the Land Instruments International web site at [www.landinst.com](http://www.landinst.com).



### RT8A SPECIFICATION

Measurement range	Operating	Specified*	<b>WARRANTY</b> <i>RT8A thermometers have an extended 36 month warranty, except where used in specific industries, such as roadstone/ asphalt, due to the harsh nature of the application. Contact Land for further information.</i>
RT80A	0 to 250°C	0 to 250°C	
RT81A	0 to 500°F	30 to 500°F	
RT82A	0 to 500°C	0 to 500°C	
RT83A	0 to 1000°F	30 to 1000°F	
Spectral response:	8 to 14µm (nominal)		
Output:	Linear 4 to 20mA, 2-wire loop connection		
Emissivity adjustment:	0.10 to 1.09 in 0.01 increments		
Response time:	1 to 10s adjustable (0 to 95%)		
Resolution:	<0.1°C/0.2°F		
Accuracy (absolute):	<0.5% of span (*within specified temperature range)		
Ambient temp. limits:	-5 to 50°C/23 to 122°F (specified), -5 to 70°C/23 to 159°F (operating)		
Drift with ambient temp.:	≤1.5°C per 10°C/≤1.5°F per 10°F		
Drift with time:	<1°C/2°F per year		
Power supply:	11 to 45V d.c., 2-wire loop connection		
Load resistance:	1Kohms max.		
Vibration:	3G any axis, 10 to 300Hz		
EMC:	EN 50081-1 (emissions), EN 50082-2 (immunity), EN 61010-1 (electrical safety)		
Sealing:	To requirements of IP65/NEMA4X		
Weight:	1.4kg/3.0lb		