

## INCINERATOR THERMOMETER - CDA

For temperature measurement in thermal waste treatment plants

### The Process

Incinerators are used to destroy municipal, medical and hazardous wastes. Many federal, state and local regulatory agencies require the installation and use of a furnace gas temperature measurement device. The traditional method for this has been contact thermocouples installed in the furnace gas stream.

### The Solution

The CDA Incinerator Thermometer is a non-contact temperature measurement device. It can best be described as an "invisible thermocouple" which will measure into the combustion chamber at approximately 6 to 7 feet (2 meters). All parts of the system are mounted external to the process, therefore eliminating the affects of the high temperature, corrosive atmosphere on the device. This ensures a high accuracy temperature measurement that requires little maintenance over long periods of operation.

### The Problem

The environment in an incinerator contains high temperature corrosive gases, as well as various particulate levels. These conditions can affect the life of a thermocouple, creating a high annual cost of maintenance and replacement of the temperature measuring device.

# LAND

Land Instruments International Ltd • Dronfield S18 1DJ • England • Tel: +44 (0) 1246 417691 • Fax: +44 (0) 1246 410585  
Email: [infrared.sales@landinst.com](mailto:infrared.sales@landinst.com) • [www.landinst.com](http://www.landinst.com)

AMETEK Land, Inc. • 150 Freeport Rd. • Pittsburgh, PA 15238 • U.S.A. • Tel: +1 (412) 826 4444  
Email: [irsales@ametek.com](mailto:irsales@ametek.com) • [www.landinstruments.net](http://www.landinstruments.net)

### Non-Contact Temperature Measurement Solutions

**France**  
Ametek SAS - Land  
Tel: (1) 30 68 89 80 • Fax: (1) 30 68 89 99  
Email: [land.france@ametek.com](mailto:land.france@ametek.com)

**Japan**  
Land Instruments Ltd  
Tel: 06 6330 5153 • Fax: 06 6330 5338  
Email: [info@landinst.jp](mailto:info@landinst.jp)

**China - Beijing**  
Land Infrared Temperature Measurement  
Tel: +86-10-85262111 Ext 39  
Fax: +86-10-85262141  
Email: [infrared.sales@landinst.com](mailto:infrared.sales@landinst.com)

**Germany**  
Ametek GmbH - Land Instruments  
Tel: 02171/7673-0 • Fax: 02171/7673-9  
Email: [info.land-de@ametek.de](mailto:info.land-de@ametek.de)

**Spain**  
Land Instruments International  
Tel: 91 630 0791 • Fax: 91 630 2918  
Email: [land-infrared@landinst.es](mailto:land-infrared@landinst.es)

**Italy**  
Ametek Srl - Land Division  
Tel: 02/946931 • Fax: 02/94693850  
Email: [info.land@ametek.it](mailto:info.land@ametek.it)

**Mexico**  
Ametek Land Inc  
Tel: 52 55 52811165, 52807933 • Fax: 52 55 52815364  
Email: [ventas@ametek.com](mailto:ventas@ametek.com)

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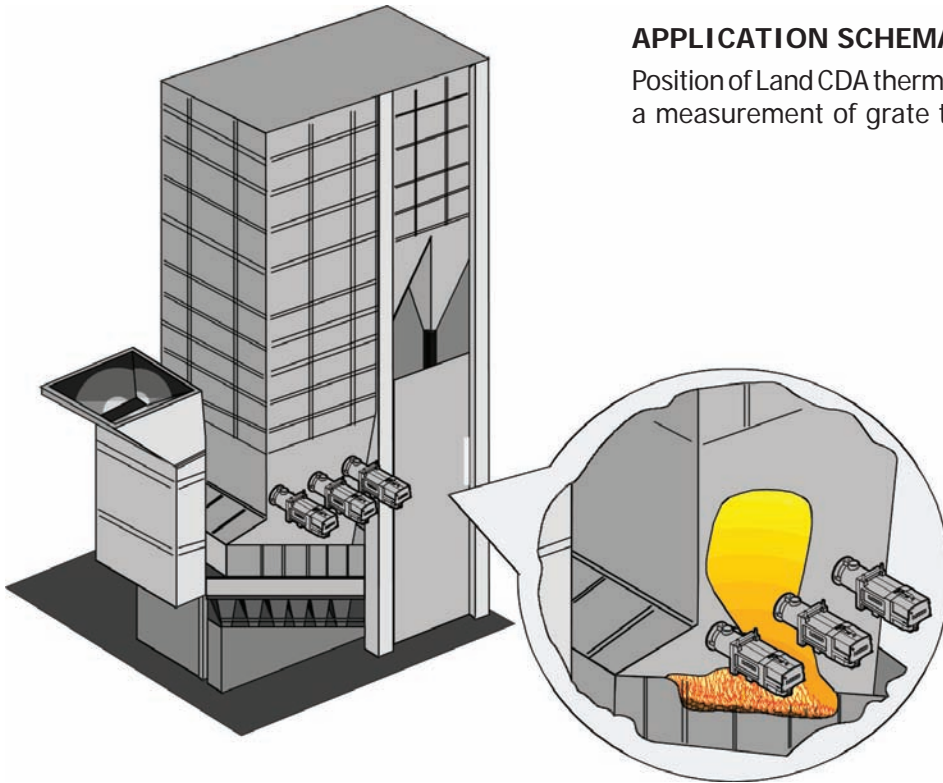
Applies to the UK



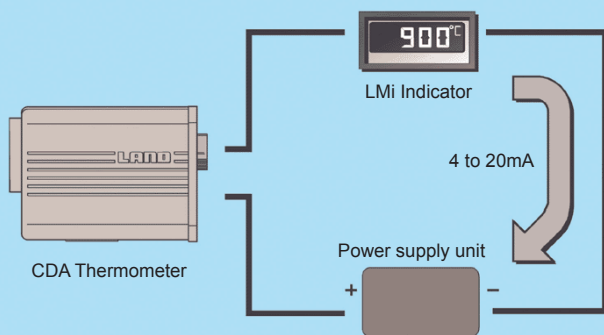
Applies to the USA

## APPLICATION SCHEMATIC

Position of Land CDA thermometers to obtain a measurement of grate temperature

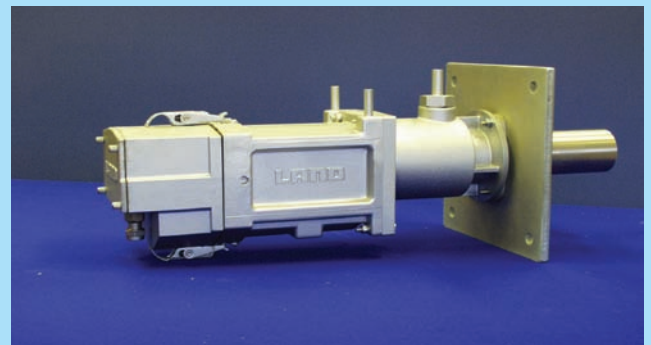


## SCHEMATIC DIAGRAM



## MOUNTINGS & ACCESSORIES

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



## CDA SPECIFICATION

Range:	400 to 1800°C/752 to 3272°F
Output:	4 to 20mA linear (2-wire loop connection)
Response time:	1 to 10s adjustable
Resolution:	<0.5°C/1°F
Accuracy (absolute):	<0.5% Kelvin over 600 to 1600°C/1112 to 2912°F
Ambient temp. limits:	0 to 50°C/32 to 122°F (without water cooling mountings)
Drift with time:	<1°C/2°F per year
Power supply:	11 to 45V d.c.
Sealing:	To IP65/NEMA4X requirements
CE:	EN 50-082-2 (immunity), EN 50-081-1 (emission), IEC 1010 (safety)
Vibration:	3G, any axis, 10 to 300Hz