

# Data Logging System for Land Cyclops Portables



## Cyclops DL-1000 Data Logging System

**The Pocket PC based Cyclops DL-1000 Data Logging System provides a fast and simple wireless method for logging temperature readings taken using Land Cyclops Portable Infrared Thermometers.**

All Cyclops portables incorporate Bluetooth® technology, allowing wireless data logging to Bluetooth® equipped iPAQs®, stored safely in your pocket, and to PC/laptops.

The stored readings can then be transferred from the Pocket PC using Microsoft® ActiveSync® file transfer utility to a partnership PC for further analysis and trending purposes.

Additional temperature logging functions such as timed acquisition, timer interval and background measurements can be set up when the actual measurements are being made.

The timed acquisition function allows temperature data to be logged automatically at predetermined intervals ranging from 1 to 3600 seconds in 1 second increments.

The background compensation function is available when using a Cyclops 390B FurnacePro thermometer, enabling true temperature readings to be calculated in applications where the target temperature is lower than the surrounding background, such as reheat and reformer tube furnaces.

The true target temperature is automatically corrected for errors caused by reflected hotter background temperatures.

- Automatic, wireless data logging of all measured temperatures;
- Background compensation function calculates true target temperature, automatically correcting errors caused by reflections from hotter background temperatures;
- Can be used with the Cyclops 100, 160, 055 Meltmaster and 390 FurnacePro;
- IP67 Rugged PDA also available.
- Wireless Bluetooth® connectivity does away with troublesome cables and connectors

# LAND

**Non-Contact Temperature  
Measurement Solutions**

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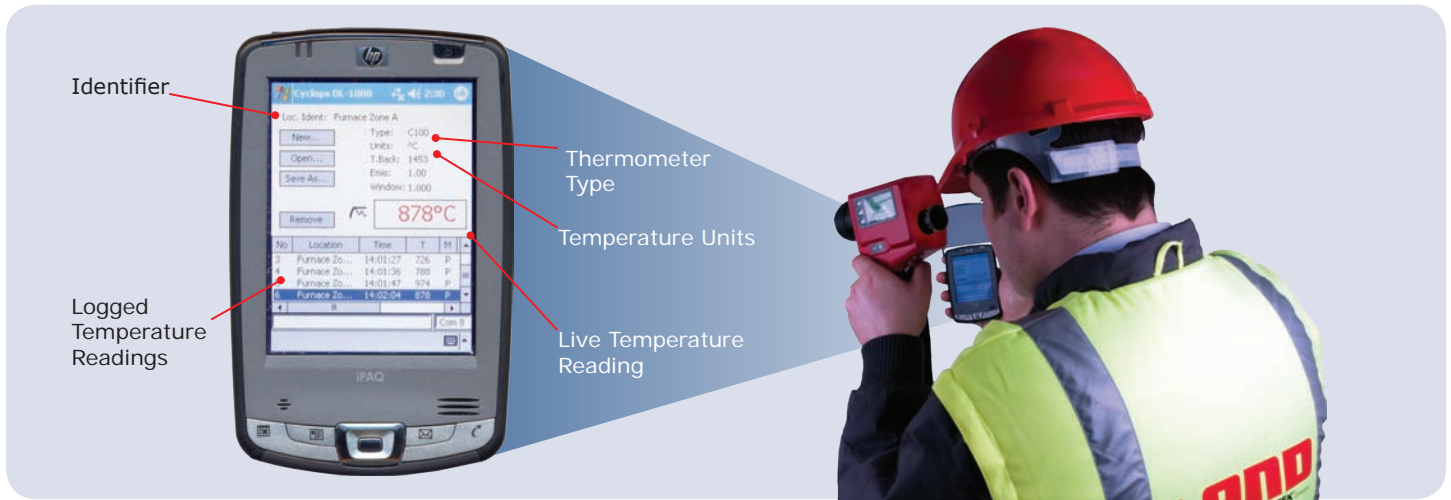
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**Cyclops 055 Meltmaster** is a dedicated high precision, portable infrared thermometer, designed for accurate measurement of liquid metal temperatures in the range 1000 to 2000°C / 1832 to 3632°F.

The operating waveband of 0.55µm has been carefully chosen to minimize errors due to uncertainty in emissivity and the effects of atmospheric vapor components. (see datasheet LCM\_055 for further details)

**Cyclops 100** is a general purpose, high precision, portable infrared thermometer, designed for accurate measurement of temperatures in the range 550 to 3000°C/1022 to 5432°F.

The operating waveband of 1.0µm has been carefully chosen to minimize errors due to uncertainty in emissivity and the effects of atmospheric vapor components. (see datasheet LC100 for further details)



**Cyclops 390B FurnacePro** is a dedicated high precision, portable infrared thermometer, designed for accurate measurement in gas or oil fired furnaces, in the temperature range 450 to 1400°C / 842 to 2552°F.

The operating waveband of 3.9µm eliminates errors caused by absorption/emission bands present in combustion gases and reduced errors caused by background reflections. (see datasheet LCM390 for further details)

**Cyclops 160B** is a general purpose, high precision, portable infrared thermometer, designed for accurate measurement of temperatures in the range 200 to 1400°C/392 to 2552°F.

The operating waveband of 1.6µm has been carefully chosen to minimize errors due to uncertainty in emissivity and the effects of atmospheric vapor components. (see datasheet C160B for further details)



	Cyclops 100	Cyclops 160	Cyclops 055 Meltmaster	Cyclops 390B FurnacePro
Temperature Range	550 to 3000°C 1022 to 5432°F	200 to 1400°C 392 to 2552°F	1000 to 2000°C 1832 to 3632°F	450 to 1400°C 842 to 2552°F
Spectral Response	1µm	1.6µm	0.55µm (nominal)	3.9µm (nominal)
Accuracy	≤0.25% (K)	≤0.25% + 2°C	<1°C/2°F	≤1°C/2°F
Field of View	180:1*			180:1 square*

\* to 98% energy