

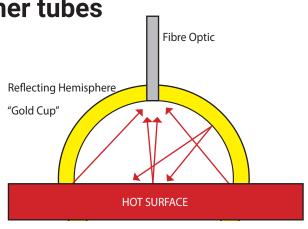
## **Gold Cup**

Reference Pyrometer for reformer tubes

The Gold Cup is a non-contact thermometer specifically designed for taking reference measurements in fired heaters in the hydrocarbon processing industry. The Gold Cup has a gold hemisphere which when in contact with a tube stops any hotter background radiation from influencing the measurement. Due to its design and the highly reflective gold coating the energy is reflected at least 12 times before reaching the detector, each reflection has a emissivity enhancing effect (making the emissivity of the measurement closer to 1.00), when reflected 12 times the emissivity can be taken as 1.00. this black body condition combined with the omittance of any background radiation ensure very accurate true tube temperature is obtained.

When the Gold Cup is being used, it is first connected to its water-cooling supply and the thermometer is connected to a display unit. The Gold Cup is inserted through a port into the furnace and the gold cup is touched onto a tube to be measured, ensuring the probe is level and aligned with the centre of the tube. The temperature reading is immediately recorded before the tube has a chance to cool.

The Gold Cup thermometer is LAND's unique reference measurement solution for reformer tubes in hydrocarbon processing applications.



## FEATURES & BENEFITS

- Unique reference: No other measurement device can provide the true temperature reading delivered by Gold Cup. Conventional infrared temperature measurements depend on accurate emissivity determination and compensation for the furnace environment. Gold Cup's innovative technology cancels out these factors.
- Portable operation: The temperature display unit is batterypowered, this also powers the thermometer. Meaning the fired heater run more effectively and accurately.
- Improves your process: By increasing the accuracy of other non-contact devices, it helps make your fired heater operations more efficient while also extending tube life.
- Reduces errors: The Gold Cup provides reference readings that enable the correction of non-contact temperature measurement instruments. It cancels out the inherent errors typically found within other infrared thermometers.

See degrees differently.

## SPECIFICATIONS SHEET

	Gold Cup
Spectral Response:	1.6 µm
Output:	LCD Display 300 to 1300 °C (572 to 2372 °F)
Response time:	0.5 s
Resolution:	0.1 °C/ 1 °F
Repeatability:	1 °C / 2 °F
Absolute accuracy:	0.25% °C + 2 °C
Ambient temp limits:	0 to 60 °C / 32 to 140 °F
Power Requirement:	1 x 9 V PP3 battery
Maximum cooling water pressure:	3 bar
Cooling connections:	3/8" BSP Inlet/outlet connections
Sealing:	IP67
Weight (including dry protective cover):	6.9 kg / 15.2 lb
Included Accessories:	Rubberised Hand Held Display Unit Case
Cooling control panel inc hoses:	Contact Land Instruments for Details
UKAS Calibration	Contact Land Instruments for Details



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