

Fluke 572, 574 and 574-NI Infrared Thermometers

Non-contact temperature measurement



Technical Data

When the job demands precision and accuracy

Broad temperature range, superior optics and the advanced extra-bright three-dot laser sighting system make Fluke 570 series thermometers the most advanced portable thermometers in the industry.



Preventive Maintenance



Electrical

574-NI Nonincendive Model

When safety is a concern and data logging and downloading are required, the Fluke 574 Nonincendive (NI) model thermometer is the product to choose. It has the same great features as the standard 574 model thermometers with the extra confidence of a Factory Mutual approval for use in hazardous environments*. The Fluke 574–NI thermometer,



does not to release enough electrical or thermal energy to ignite flammable gases or vapors under normal operational and environmental conditions.

*See specification table for details.



Advanced Display

- 100-point onboard temperature data logging capability
- 30 preset common material emissivity values
- Adjustable emissivity values (0.01 increments)
- Customizable log names, alarms, and emissivity

Advanced Sighting



Accurate measurements depend in part on accurately sighting a target. Fluke 570 series thermometers are the only thermometers with a sighting system designed to precisely track the infrared path as seen by the sensors. This enables the advanced coaxial three-dot laser sighting to accurately show both the center and the edges of the spot being measured, regardless of the thermometer's distance from the target.

This laser sighting also appears twice as bright to the human eye as normal lasers (while maintaining the same safety rating as less bright lasers), making precise sighting easier in a variety of lighting conditions and distances.

Close Focus Option

The Close Focus (CF) option lets you accurately measure very small areas at the focus point – where the IR beam narrows. Paired with the advanced coaxial laser sighting system, extremely small objects 6 mm (0.24 in) at 300 mm (11.4 in) can be easily measured. Ideal for electrical maintenance and refrigeration troubleshooting.







Software for Condition Monitoring and Process Control

Visualize, systematically maintain and analyze temperature data using Windows[®] compatible software and a Fluke 574 or 574-NI IR thermometer.



Easily see temperature trends and potential equipment problems by graphing data accumulated with the unit's data logging feature.

The software

makes it easy to error-proof

inspection routes

by giving names,

alarm points and emissivities to

locations.

No. of Call of		les	20	Q.	日日	IOM	16					
7	1	les	12	633	레몬							
0.00	141	100				ALC: N		-		-	No.	
10.00	Della.		_	-	1.00		100	(Dest.	Mana men	[a degree	74.000	1
10		CO. N	10.00	10.4	101		793	24	Ross and	20.0	18.2	100
140	NRS.	0.008	1140	44.8	141	MI	1963	1.44	Finite	14.1	1615	141
	hat i	10.2018 1	6.75.2	14.8	311	80	1914	1.44	Paint	10.0	1912	100
1.802	100	to take it	4.00.0	411	10.0	812	764	1.44	Cavella .	10.0	14.0	100
100	-	UND P	1014	142.4	1014	10.4	782	1.00	Statute 1	81.0	100	100
140	541	C KI M P	100.0	41.0	1818	1413	net.	1.00	Covers.	22.8	140	-
100	1461	121003	8 794	144		812	142	1.0	0.048	10.0	144.6	-
1.60	and a	CRAP	a (d) a 1	14.2	10.4	264	244	1.0	Conde .	368	-14	-
140	Net I	124.87	w their	1011	100.0	10.4	Test	1.16	Dava, post	10.0	123	-
140	Set.	10 million Pe	4.672	10.0	100	10.4	net.	1.46	Desired .	344	1416	-
80	inter i	0.000	M 154.0	14.7	144	104.4	19.4	1.0	0.008	12.0	100	-
100	inin'	0647	1.00	14.0	144	mia.	162	1.00	Fig.	10.0	12.8	-
1.60	Set.	121708-1	101	12.1	10.4	822	164	1.0	free .	10.0	121.0	-
1.60	side i	0034	14 1610 H	10.4	100	140.1	1913	1.00	Page 1	100	129	-
1.60	inter i	0.000	100.2	10.4	1850	10.0	ind.	1.4	Fee	10.0	100	-
1.00		they be in	10.0	10.2	194	114	16.1	1.44		10.0		14
	-	-	1.000	-	1041	10.4	100	1.00				12
1.000	-		10.0	100	100	100	10.0	10				12
ł	1.1	Incoder Access	HOURS CLARM A MONEY CONTACT AND A MONEY CONTACT AND A	1000 - 11 41 Per 1013	10001 (01140 PM 100.0 (01.0	10000 (01140 Per 100.) (0.1 (Pe)	10001 (01140 Per 1013 (013 (143) 1114	10001 (01140 No. 1012 (012 1014 No.	10001 (11140 No. 1012 (012 (101) 1014 (016) 018)	10001 (1114) Mark 813 (813 1913 1914 1918 1916 1916	10001 (11140 Per 1012 1012 1012 1014 1016 1016 Fee 1010	NORT OFTER PARTIES. BUT 1945 THA 244 D.B. Post 200 1000



The 574 can be used to monitor, graph, and record real-time temperature changes with the software.

Export Format " Flowing paint format S Replachment Time mode Depresal digits for electrada 2 1 W Abarbia F Loading Zen C Rolotive to hoster Of Show date P Show time Duno entrer 17 24 His.m. # day/mont/vyoar Out-sites month/dep/year Tena 8 Tana (Sec mush) C vetalitize/month Date / Term # State C yearing and billion CEat

The software provides a convenient way to export temperature data files in a format that can be used by programs such as Access[®], Excel[®], and condition monitoring programs.

Graph

- Visually review data and spot trends instantly through graphs
- Simultaneously graph results while continuously monitoring temperatures
- Quickly compare temperatures of up to five log locations for trends or anomalies
- Display infrared and/or probe temperature trends over time
- View infrared and probe values continuously on thermometer sidebar

Data log

- Create recognizable names for inspection locations
- Track both infrared and probe temperature trends
- Tailor high/low alarms per individual inspection location
- View min, max, and average infrared and probe temperatures
- Create and customize emissivity tables for each inspection location
- Store up to 10,000 data points in a file

Reporting and documentation

- Customize report views and printing formats
- Generate time and datestamp printouts for accurate records
- Export data as text files for integration with Maintenance, Repair and Operations (MRO) systems and other database programs



Specifications

Specifications	Fluke 572	Fluke 574	Fluke 574-NI				
Temperature range		to 900 °C (-25 °F to 1					
Accuracy	\pm 0.75 % of reading or \pm 1 °C (\pm 2 °F), whichever is greater (assumes ambient operating temperature of 23 °C (73 °F))						
Repeatability	$\leq \pm 0.5$ of reading or $\leq \pm 1$ °C (± 2 °F), whichever is greater						
Response time	250 mSec (95% of reading)						
Spectral response	8 – 14 microns, thermopile detector						
Adjustable emissivity (from 0.1 to 1.0 by 0.01)	•	•	•				
Ambient operating temperature	0 °C to 50 °C (32 °F to 122 °F)						
Relative humidity	10 to 90% at 30 °C (86 °F) non-condensing						
Storage temperature	-20 °C to 50 °C (-25 °F to 122 °F)						
Weight	480 g (1 lb 6 oz)						
Power	2 AA batteries	2 AA batteries/ AC adapter	2 AA batteries/ AC adapter				
Power supply, RS232 Computer Cable, 1.5 m (60 in), K thermocouple probe	_	•					
Laser Class II	3-dot laser sighting (meets IEC Class 2 and FDA Class II requirements)						
Distance-to-Spot (D:S)	60:1 (50:1 with C	60:1					
Minimum measurement diameter	19 mm (6 mm (0.24 in) with	19 mm (0.76 in)					
Maximum and minimum temperature	•	•	•				
Audible/visible high/low alarm	•	•	•				
Differential and average temperature	_	•	•				
Bar graph display	•	•	•				
100-points-data logging	_	•	•				
Display hold	•	•	•				
LCD backlit	•	•	•				
Temperature display	°C or °F selectable						
Display resolution	0.1 °C of readin	up to 999.8 °F)					
Data graphing software (Windows [®] NT, 2000, XP compatible)	_	•	•				
Data output: RS-232 or 1 mV per degree (°C or °F)	_	•	•				
Hard carrying case	•	•	•				
Tripod mount							
The 574-NI has a factory Mutual Nonincendive rating. The rating from this USA organization reads: "Class I, Division 2, Groups A, B, C, D; Class I, Zone 2 IIC; T4 Ta=50 °C when used with 1.5 V alkaline batteries." WARNING: Battery changes and RS-232 connection in non-hazardous	_	_	•				
locations only.	•	•					
Warranty 2 Years, Conditional*	•	•	•				

* Warranty duration may vary by country.

Ordering Information

Options

- (all models)
- Close focus*
- NIST calibration certification
- * Not available with 574-NI

Options

(574 and 574-NI)

• mV/degree output cable

Accessories

(all models)

• Padded pouch with belt clip

Accessories

(574 and 574-NI)

- PC software
- RS232 computer cable
- Plug-in power supply
- Thermocouple K probe

(Power supply and cable not approved by FM for use in hazardous locations)



Included with the Fluke 572 and 574 units:

- User's guide on CD
- Hardshell carrying case.

Fluke. Keeping your world up and running.

Fluke Corporation

PO Box 9000, Everett, WA USA 98206 Fluke Europe B.V. PO Box 1186, 5602 BD Eindhoven, The Netherlands

For more information call: In the U.S.A. (800) 443-5853 or Fax (425) 446-5116 In Europe/M-East/Africa (31 40) 2 675 200 or Fax (31 40) 2 675 222 In Canada (800) 36-FLUKE or Fax (905) 890-6866 From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116

Web access: http://www.fluke.com/

©2005 Fluke Corporation. All rights reserved. Printed in U.S.A. 4/2005 2437646 D-US-N Rev A