

TECHNICAL DATA

Fluke 481 DESI Ion Chamber Survey Meter



Key features

- Detects skin-dose (beta particle) and deep-dose (gamma) and X-ray radioactivity
- Requires no adjustments; simple two button process
- Provides promptly read, correct value through autoranging capability
- Easily visible inside truck trailers and other low-light situations with automated backlight
- Works dependably inside or outside thanks to sealed case
- 30% more precise than other available meters
- Delivers more than one week of uninterrupted functioning with two 9-volt alkaline batteries
- Proven in use by state and local governmental emergency response professionals, state inspectors, HAZMAT teams and nuclear power workers
- Measures both dose and dose-rate
- Valuable for contamination-detection, general radiation area metering, radiation-level monitoring, and hazardous materials assessment
- Rugged Fluke design

Product overview: Fluke 481 DESI Ion Chamber Survey Meter

The Fluke 481 Radiation Detection Meter is a portable and practical means for discovering irradiated goods, and for helping remediate contaminant and safety issues while minimally affecting performances. Ideal for detecting irradiated goods, equipment, surfaces or environments in industrial settings, the 481 Radiation Meter helps ascertain worker safety and compliance to federal regulations.

Use of the Fluke 481 assures employees that radiation dangers are known, monitored and calculated for their security. Whenever radiation is found, a clear and quantifiable result provides handlers to comply with federal guidelines while avoiding unnecessary steps that could stop procedures, impact productivity or lead to missed revenue.

Specifications: Fluke 481 DESI Ion Chamber Survey Meter

General specifications	
Radiation detected	Beta > 100 keV
	Gamma > 7 keV
Operating ranges	0 mR/h to 5 mR/h (8 sec) 0 mR/h to 50 mR/h (2.5 sec) 0 mR/h to 500 mR/h (2 sec) 0 R/h to 5 R/h (2 sec) 0 R/h to 50 R/h (2 sec)
Accuracy	Within 10% of readings between 10% and 100% of full scale indication on any range, exclusive of energy response
Detector	Chamber (cc volume air ionization) 349 cc
	Chamber wall (phenolic) 246 mg/cm ²
	Chamber window (mylar) 6.6 mg/cm ²
	Beta slide 440 mg/cm ²
Automatic features	Auto-zeroing, auto-ranging, and auto-backlight
Power requirements	Two 9 V alkaline, 200 hours operation
Warm-up time	One minute
Baery life	Four+ hours continuous use per baery pack (assumes 50% brightness of LCD)
Dimensions (W x D x H)	10 x 20 x 15 cm (4 x 8 x 6 in)
Weight	1.11 kg (2.5 lb)
Display LCD analog/digital with backlight	
Analog	100 element bar graph 6.4 cm long. Bar graph is divided into 5 major segments, each labeled with the appropriate value for the range of the instrument
Digital	2.5 digit display is followed by a significant zero digit depending on the operating range of the instrument. The units of measurement are indicated on the display at all times. Digits are 6.4 mm (0.25 in) high. Low baery and freeze indicators are also provided on the display
Modes	
Integrate mode	Operates continuously 30 seconds after the instrument has been tued on. Integration is performed even if the instrument is displaying in mR/h or R/h
Freeze mode	Will place a tick mark on the bar graph display to hold on the peak displayed value. The unit will continue to read and display current radiation values
Environmental	



Temperature range	-4°F to 122°F
Relative humidity	0% to 100% (at 140°F)
Geotropism	< 1%

Ordering information



Fluke 481 DESI

Fluke 481 DESI Ion Chamber Survey Meter

481-DESI Ion Chamber Survey Meter, dose equivalent SI



Fluke. *Keeping your world up and running.®*

Fluke Corporation
PO Box 9090, Everett, WA 98206 U.S.A.

For more information call:
In the U.S.A. (800) 443-5853
In Canada (800) 36-FLUKE
From other countries +1 (425) 446-5500
www.fluke.com

©2025 Fluke Corporation.
Specifications subject to change without notice.
04/2025

**Modification of this document is not permitted
without written permission from Fluke
Corporation.**