

# 3430+ and 3440+ Nuclear Moisture Density Gauges



“Troxler provides trusted leadership in the industry. . . Not imitation.”

## Product Information

The Troxler 3430+ and 3440+ aren't just the latest generation in Troxler's trusted line of nuclear moisture density gauges. With features that will change the way you take, analyze, and report density readings, they truly represent the future of density gauge technology.

Both ROADREADER PLUS™ models feature direct readout of wet density, dry density, moisture, % moisture, % voids and % compaction on an enlarged 4 line by 20 character illuminated LCD screen. Updated NiMH rechargeable batteries are standard with on-board alkaline batteries for back-up use. Both gauges allow storage of measurement data as well as target densities, four standard counts and Stat/Drift data for later viewing, printing or downloading.

## New Features Available on the Model 3440+

- USB port for immediate uploading of data to flash drive or printer
- Backlit keypad for use in dimly-lit situations
- Remote start keypad on the handle for convenience
- Updated Automatic Depth feature
- Optional GPS allows the gauge to report latitude and longitude of each measurement site



Model 3440 Plus Nuclear Gauge w/USB and GPS

 Winner of the 2003 IRF Global Road Achievement Award in the category of Technology, Equipment & Manufacturing



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# Technical Specifications



## Mechanical

Gauge Size (including handles)	12" - 23.5 x 9 x 14.5 inches (59 x 22.9 x 36.8 cm) or 8" - 19.5 inches height (49.5 cm)
Shipping Case Size	29.4 x 13.9 x 16.9 inches (75 x 35 x 43 cm)
Gauge Weight	29 pounds (13.1 kg)
Shipping Weight	85 pounds (38.5 kg) in shipping case
Operating Temperature	Ambient: 32 to 158°F (0 to 70°C) Surface: 350°F (175°C) for 15 minutes
Storage Temperature	-70 to 185°F (-55 to 85°C)

## Radiological

Gamma Source	0.30 GBq (8 mCi) ± 10% Cs-137
Neutron Source	1.48 GBq (40 mCi) ± 10% Am-241:Be
Source Housing	Stainless Steel, encapsulation
Surface Dose Rate	(5 cm) 19 mrem/hour maximum, neutron and gamma
Shipping Case	DOT 7A, Type A, Yellow II label, TI=0.3

## Electrical Power Source(s):

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Main	5 C NiMH (Rechargeable Pack)
Backup	5 AA Alkaline Batteries
Stored Power:	4 ampere hours
Battery Recharge Time:	3 hours maximum, auto cutoff
Charge Source:	110/220 VAC, 50-60 Hz or 12-14 VDC
Current Consumption Average:	35 mA
Time Before Auto Shutdown:	5 hours of inactivity
Readout:	4 x 20 alpha-numeric
Keypad:	30 key sealed membrane

Measurement	15 seconds	1 minute	4 minutes
<b>Direct Transmission – (6"/150 mm)</b>			
Precision at 125 pcf (2000 kg/m <sup>3</sup> )	± 0.42 (± 6.8)	± 0.21 (± 3.4)	± 0.11 pcf (± 1.7 kg/m <sup>3</sup> )
Composition Error at 125 pcf (2000 kg/m <sup>3</sup> )	± 1.25 (± 20)	± 1.25 (± 20)	± 1.25 pcf (± 20 kg/m <sup>3</sup> )
Surface Error (0.05", 100% Void) pcf (1.25 mm, 100% Void) kg/m <sup>3</sup>	-1.06 (-17)	-1.06 (-17)	-1.06 pcf (-17 kg/m <sup>3</sup> )
<b>Backscatter – (98%) (4"/10 cm)</b>			
Precision at 125 pcf (2000 kg/m <sup>3</sup> )	± 1.00 (± 16)	± 0.50 (± 8)	± 0.25 pcf (± 4 kg/m <sup>3</sup> )
Composition Error at 125 pcf (2000 kg/m <sup>3</sup> )	± 2.5 (± 40)	± 2.5 (± 40)	± 2.5 pcf (± 40 kg/m <sup>3</sup> )
Surface Error (0.05", 100% Void) pcf (1.25 mm, 100% Void) kg/m <sup>3</sup>	-4.7 (-75)	-4.7 (-75)	-4.7 pcf (-75 kg/m <sup>3</sup> )
<b>Moisture at 250 Kg/m<sup>3</sup> (15 pcf)</b>			
Precision at 15 pcf (250 kg/m <sup>3</sup> )	± 0.64 (± 10.3)	± 0.32 (± 5.1)	± 0.16 pcf (± 2.5 kg/m <sup>3</sup> )
Surface Error (0.05", 100% Void) pcf (1.25 mm, 100% Void) kg/m <sup>3</sup>	-1.12 (-18)	-1.12 (-18)	-1.12 pcf (-18 kg/m <sup>3</sup> )

Meets ASTM standards D6938, D2950 and C1040



**Troxler Electronic Laboratories, Inc.**

Phone: **1-877-TROXLER**  
(8769537)

International: **1-919-549-8661**

Fax: **1-919-549-0761**

3008 Cornwallis Road  
PO Box 12057  
Research Triangle Park, NC 27709



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