

Power and Energy Measurement Specialists

MODEL 430

UTECH Ultra-Compact Portable Meter Test Kit



Compact - 25 lbs.

**Compatible with
RD or RM Standards**

**Cost-effective
Testing Solution**

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Open and Closed Link Testing

Ultra-Compact Portable Meter Test Kit

The Model 430 is the first Ultra-Compact Portable Phantom Load Test Kit to support both the Radian Dytronic (RD) and the installed base of Radian Metronic (RM) reference standards. The ability to support both reference standards makes the 430 the ideal budgetary solution for on-site meter testing. Do not let its compactness fool you, the 430 has three 30 Amp current output elements for performing single phase or three phase meter testing. Additionally, when each element is combined using the optional open link cable harness, it can source up to 90 Amps.

The new 430 manufactured by Radian further increases its value as a testing solution. Whether you are an entry or advanced user we have the ideal solution. No need to deal with multiple manufacturers including the training and compatibility problems involved, Radian provides consistent and familiar functionality across the entire metering testing spectrum.

Light Weight Compact Design

The Model 430 UTEC Ultra-Compact Phantom Load Test Kit houses three 30 Amp current sources, Current Element Routing, Current Tap Control, Fuse less Protection, Supply Voltage Selection, Power Factor Control, Test Current Adjustment and a Radian Research Energy Reference Standard inside a durable, high-impact polypropylene weather proof case. At a small size of 14.95 x 12.13 x 9.58 inches and 25 lbs the 430 contains all the ability of traditional test kits and more.

Ease of Operation

A LED histogram is utilized to show the current output level in respect to the current tap setting. Ranges from 80% to 120% of current tap are easily indicated and when at 100% two LED are lit for set point awareness.

A convenient on/off breaker switch is used to power the unit. No need to replace fuses if the breaker trips. The breaker will trip automatically if the current draw exceeds 5 amps providing operator safety. If a wiring mistake is made the error can be corrected and the breaker reset without the need to replace fuses. Calibration is easy with access to the Reference Standard available after removing the safety cover using the three top panel access screws.

Light Weight Cost-effective and Rugged Meter Testing Solution



Model 430 Features

- Closed-link (Isolated 0-30 Amps x 3)
- Open-link (One 0-90 Amp)
- Light Weight (25 lbs.)
- Safety Breaker Switch trips if misconnection occurs - no fuses
- Full and light load testing with P.F. of 1.0 and 0.5 lagging
- Choice of Accuracy Class RD-20 $\pm 0.04\%$, RD-21 $\pm 0.02\%$ or use a legacy RM Metronic Standards

Versatility

The versatile 430 can utilize the advanced measurement functions of an RD standard; or if the functionality of a legacy RM is adequate, cost savings can be realized by using an existing standard from your utility's equipment inventory.

Flexible Design

The 430 provides support for many traditional testing methods. It can test using the historic Radian RM-1N (no longer available) counters or test using the modern and fully automated RM-111 comparator. If an RD reference standard is utilized, testing can be performed directly using the built-in comparator or via RS-232 communications and Radian's PCSuite Software. Using the supply voltage selection input, the 430 supports voltage ranging from 69 to 480 Volts AC.

Testing styles differ around the world, and the 430 allows for testing with 1, 2 or 3 elements. Each element supports 30 Amps output and can also be paralleled. Easy setting and adjustment for the current output is coordinated using the current tap settings knob and the current output adjustment knob.

Test Method

Closed-link or open-link, Phantom Loading.

Test Voltage

Switch selectable 69, 120, 208, 240, 277 and 480 volts, 60 Hz.

Test Current

FL currents: 90*, 60*, 30, 20*, 15, 10, 5 and 2.5A

PF currents: 90*, 60*, 30, 20*, 15, 10, 5 and 2.5A

LL currents: 9*, 6*, 3, 2*, 1.5, 1, 0.5 and 0.25A

* With use of the optional 50 Amp open link harness or 90 Amp open link harness

Power Factor

Switch selectable from 1.0 and 0.5 lag (current lagging voltage).

Element Selection

Switch selectable for A, B, C, AB, AC, BC, ABC. (closed-link)

Switch selectable for X1, X2, X3. (open-link)

Accuracy

Refer to RD-20, RD-21, RM-10, RM-11 datasheet.

Test Cables

Radian manufactures and offers a variety of test cables that are terminated using:

- Insulators & Copper Alligator Clips
- Ekstrom or Cam-Lok Connectors
- States or Multi-Amp Connectors

All test cables are manufactured from super flexible silicone rubber insulated wire that remains flexible over a temperature range of -67°C to +150°C and are loomed with a tight weave loom for extra protection and convenience. All cables are approximately 6 feet long. (Optional 12ft cable available at a reduced current rating)

Size & Weight

Size: 14.95 x 12.13 x 9.58 in. - 380 x 308 x 243 mm.

Weight: 25 lbs. - 11.33 kg. including RD-2X Reference Standard

Meter Forms

Supports a large range of Transformer Rated or Self Contained meters.

Warranty

Two year warranty. Optional extended warranty available.

Accessories

Sensors, Hand switches and Printers. Radian offers a large selection of sensors for all meter testing application. These sensors include IR, Reflective, Visible Light and KYZ and hand switch. Several options are also available for mounting the sensors to the meter under test.

Please request sensors bulletin for more information. Radian offers a wide variety of accessories. We are constantly adding new accessories as new applications develop. If you have a unique application, contact the Radian sales team. We will be glad to provide a solution.

