



# PIECAL 830

## Process Calibrator

### Advantages of the PIECAL 830 over the Fluke 725

- **Greater accuracy & more ranges**  
Better specifications for DC Volts & millivolts, Ohms, Thermocouples, RTDs & Frequency. More millivolt and frequency ranges with greater resolution for compatibility with more field instruments. Indicates in milliamps & percent of 4-20 for valve stroking.
- **Easier hookups to instrumentation**  
All connections are indicated on the display and a handy HELP chart shows all connections. Connections for 2, 3 and 4 wire RTDs without jumper wires.
- **Compatible with more instruments**  
Operates across a wider range of fixed and pulsed excitation currents for compatibility with old and new instruments. Guaranteed to work with Rosemount & Honeywell smart transmitters, all brands of PLCs and multichannel devices.  
830 includes internal 250 Ohm resistor for HART compatibility.
- **More RTD & Thermocouple types and wider temperature ranges**  
0 to 4000 Ohms - includes full range of Cu 10 Ohm through Pt 1000 Ohm RTDs (No 10 Ohm Copper on 725).  
All thermocouple ranges have 0.1° resolution in °F & °C.
- **Wider frequency ranges with greater resolution**  
High resolution range from 0.00 to 999.99 Hz vs. 1 to 1000 Hz and from 0.000 to 20.000 kHz vs. 1.0 to 10.0 kHz on the 725.
- **Easier to use** - Just pick it up, flip the switches and turn the knob - *no baffling buttons*. One handed operation to switch output between span & zero. Includes a deluxe carrying case for hands free operation.
- **Configurable Automatic stepping**  
Choose 2, 3, 5 or 11 steps vs. only 5 steps and 5, 6, 7, 8, 10, 15, 25, 30 & 60 seconds vs. only slow & fast on the 725.
- **More pressure modules & hand pumps**  
32 pressure modules for differential, gauge, absolute & compound pressure measurements. Hand pumps have dual ports and hand tightened quick connects for more flexibility.
- **Protected against misconnection to AC voltage**  
Warranted fuse-less protection against misconnection up to 60V. Fluke 725 rated only to 30V. Fluke requires non-standard fuse replacement and possible expensive recalibration or repair if exceeded.



**But wait...there's more!**  
Check out the advanced features on page two and see what you can do only with a PIE Calibrator!

Smaller & half the weight

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To order parts and items, go to [www.instrumentation.com](http://www.instrumentation.com) or call (800) 346-4620

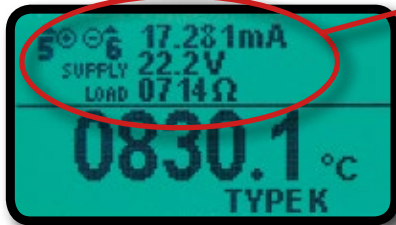


# PIECAL 830

## Process Calibrator

Loop Diagnostics • Transmitter Supply  
mA • V • pH • TC • Ω • RTD • Freq • Pressure

### Unique features of the PIECAL 830

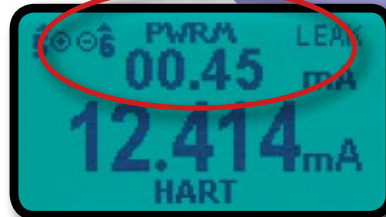


With LoopScope running the 830 simultaneously displays the sensor input along with the loop current, power supply voltage and loop load in ohms.

830 detects uncontrolled current in the loop due to a flooded junction box.

#### Use the PIE 830 as a Universal Isolated Transmitter

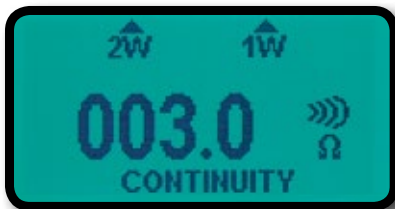
Swap out a faulty transmitter to diagnose control issues. If replacing the transmitter fixes the problem leave the 830 in place while you go to the shop to obtain and configure a replacement. Turn on LoopScope while running as a transmitter and see the status of the loop. Use the LoopScope to simultaneously display current, power supply voltage and loop resistance (load) in live loops.



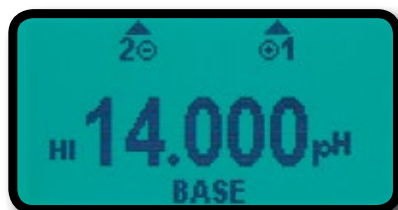
**Built-in troubleshooting tools**  
Detect hidden loop problems caused by ground faults & current leakages.



Automatically detect 2, 3 or 4 wire RTDs.



Continuity tester with beeper to find broken wires and shorts.



Sources pH - 830 has a dedicated pH range as well as wider millivolt ranges



Hands free carrying case with pockets for the PIE 830 and the Pressure Module.  
Back of case has zipped pocket for the manual, test leads, hoses & pressure fittings.

PIE 830 Comparison to Fluke 725 Rev A 9 January 2013  
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To order parts and items, go to [www.instrumentation.com](http://www.instrumentation.com) or call (800) 346-4620