

Ω-CHECK®

Concentric Neutral Resistance Tester

The Ω -Check[®] from HVI is the most accurate, most efficient, and easiest to use method of measuring the integrity of the concentric neutral of a primary power cable while still energized. An intact concentric neutral is essential to your electrical systems reliability and safety and also for ensuring the effectiveness of preventative maintenance testing like VLF withstand, Tan Delta, or Partial Discharge testing, as well as primary cable fault location using Thumpers and TDR. The **Ω-Check**[®] compares the resistance of the neutral under test to a mathematically perfect neutral of the same specification. Once the operator enters the cable's length, number of neutral strands, and the AWG of the neutral strands, the device applies an AC voltage across the neutral and measures the resultant current. The multiprocessor then calculates the resistance, the ratio of that resistance to that of a perfect neutral of the same design and displays the results in a percentage of the concentric neutral remaining intact and the ratio of the measured resistance to the ideal. Other results displayed are the resistance of the neutral in Ω per 100ft, the voltage & current, and the power factor of the neutral under test. All test data is saved to an SD card for easy storage and transfer to a tablet or laptop.

- · Cable remains energized during the test.
- · Conforms to IEEE 1617 Standards.
- Helps prevent shock hazards and locate stray voltages/currents.
- Helps overload protection systems function as expected, limiting possible damage.
- Improves the accuracy of Withstand and Diagnostic testing which can be compromised if the neutral is degraded.
- Helps to prioritize cable replacement efforts by comparing the condition of many neutrals.
- Injecting/Rejuvenating cables? Make sure enough neutral remains to justify the time, effort and expense.
- Fault locating cables? Avoid lost time, minimal success, and unsafe conditions if too little neutral remains.

Model	Ω-CHECK [®] Concentric Neutral Resistance Tester
Input	OCK-30 - 1800VA, 120V@60Hz, 15A max. OCK-30F - 1800VA, 230V@50-60Hz, 8A max.
Output	0-48VAC, 30A max.
Current Probe Input	1000:1, 0-140mA (140ARMS)max
Accuracy (V,I)	±1%
Accuracy (phase)	±1.5°
Temperature (operating)	32 to 113°F, 0 to 45°C
Temperature (storage)	-4 to 158°F, -20 to 70°C
Humidity	0-85% non-condensing
Dimensions	20" x 12" x 19", 508mm x 305mm x 483mm
Weight	OCK-30: 55lb, 25kg OCK-30F: 69lb, 32kg
Scope of Supply	x2 Test Conductor Clamps, x2 500ft Remote Test Lead Reels (1 has connectors at 100ft intervals), 10ft Local Test Lead, Molded Power Cord, 20ft 4AWG Safety Ground Cable, 1000:1 Ratio Current Probe, Users Manual, and Calibration Certificate













