TEST & MEASUREMENT

SureTest[®] Circuit Analyzers

- Measures voltage drop under load*
- Hot and neutral conductor impedances
- Estimates Load on Line (ELL) up to 15A
- Tests GFCIs and EPDs for proper operation
- Super-bright display
- High accuracies
- True RMS
- Line voltage
- Peak voltage
- Frequency
- · Ground to neutral voltage
- · Ground impedance
- Identifies proper wiring in 3-wire receptacles
- Identifies false (bootleg) grounds
- Conducts testing without disturbing sensitive loads
- Verifies isolated grounds (with 61-176 adapter)

ces 15A eration 61-165 Gec Gec Gec Circuit Analyzer True RMS





Troubleshoots branch circuit problems

AFCI testing with alligator clips on an installed device.

Description	Cat. No.
SureTest [®] Circuit Analyzer - Tests AFCIs wiring, tests for shared neutrals	61-165
SureTest [®] Circuit Analyzer	61-164

Accessories

Includes	
Carrying Case	61-179
1' Extension Cord	61-182
Optional	
Ground Continuity Adapter	61-175
Isolated Ground Adapter	61-176
Alligator Clip Adapter	61-183

Specifications

	Range & Resolution	Accuracy
AC Voltage	85.0 - 265.0 VAC	1.0%
Frequency	45.0 - 65.0 Hz	1.0%
Impedance	0.00 - 1.99 Ω	5.0%
Ground-Neutral Voltage	0.0 - 24.0 VAC	2.0%
% Voltage Drop 12A, 15A, 20A load tests	0.1% - 50.0%	5.0%
GFCI Test Current/Time	6.0 - 9.0 mA 0.0 - 6500 mS	2.0%

SureTest® Circuit Analyzer Functions

Voltage Drop

NEC recommends no more than 5% voltage drop
Higher voltage drop leads to heat buildup and performance issues



• <108V is a poor level for voltage load

Line Voltage

Specification is 120VAC +/-10%

(108 to 132 VAC)

 True RMS ensures accuracy in harmonic environments

Ground-to-neutral Voltage

- Good circuit has 2VAC or less
 Higher reading indicates loaded
- circuit, harmonic distortion or shared neutral

Ground Impedance

 Ground impedance should be 1Ω or less (0.25Ω or less for sensitive equipment to run properly)

GFCI

- Applies a 6-9mA fault current and measures the trip time
- Applies a 30mA fault current to check for equipment protection





