

## Hioki HVAC/Electrical Contractors Kit

**NEW**

- Four Instruments to help with HVAC & Electrical Installations
- Includes Digital Multimeter, Voltage Probe, Clamp-on Meter, Temperature Gun
- Rugged carrying case for storage & protections

**Hioki HPK-1  
HVAC/Electrical  
Contractor Kit**

**Four Instruments  
to help with  
HVAC/Electrical  
Installations**

**3120 Voltage Probe**

- Red Indicator for Voltage Presence
- Green Indicator for Battery Check
- 200 Hours on 2 AAA batteries
- User Replaceable Batteries

**3280-10 Clamp On Meter**

- 1000A AC Current Capable
- Lightweight
- Independent Jaw Opening Design
- Resistance and Continuity

**3419 Temperature Gun**

- 8:1 Optical Resolution
- Measures -20°F to 932°F
- Adjustable Emissivity 0.17 to 1.00
- 80 Hour Operation on AA batteries

**3804 Digital Multimeter**

- AC and DC Voltage and Current Measurement
- Resistance and Continuity
- Rubber Boot
- RS-232C Interface

**HIOKI**

Instrument Descriptions & Specifications on page 175 & 175a.

**ORDERING INFORMATION**

HK/HPK-1 HVAC/Electrical Contractor Kit (includes 3120 Voltage Probe, 3280-10 Clamp-on Meter, 3419-20 IR Tester, 3804 DMM)

## Hioki Testers

### MULTI-FUNCTION DMMS

- AC/DC Voltage & Current
- Resistance & Continuity
- 9999 count LCD display
- Min/Max, Average & Relative values
- 4-20 mA measurement converts to 0-100% display
- Optional RS-232C package for PC data transfer



#### SPECIFICATIONS

DC Volts:	4 ranges, 999.9mV to 999.9V ( $\pm 0.3\%$ rdg $\pm 2d$ )
AC Volts:	4 ranges, 999.9mV to 999.9V ( $\pm 1.2\%$ rdg $\pm 5d$ ) 40-500Hz
Ohms:	6 ranges, 400.0 $\Omega$ to 40.00M $\Omega$ ( $\pm 0.6\%$ rdg, $\pm 3d$ )
DC Current:	6 ranges, 400.0 $\mu$ A to 10.00A ( $\pm 0.2\%$ rdg, $\pm 3d$ )
AC Current:	6 ranges, 400.0 $\mu$ A to 10.00A ( $\pm 1.2\%$ rdg, $\pm 5d$ ) 50-2kHz
Other Functions:	Capacitance, Data hold, continuity ( $<10\Omega$ ), diode check 3805: TRMS AC, freq to 50kHz, J&K thermocouples
Ranging:	Auto or Manual
Bar Display:	41 segment
Sample Rate:	3/sec (digital), 13/sec (bar)
Dimensions:	3" x 6.6" x 1.3" (76x167x33mm)
Accessories:	Test leads 3851-10, holster, battery

#### ORDERING INFORMATION

HK/3804-50	4-Digit DMM
HK/3805-50	4-Digit TRMS DMM

### PHASE DETECTOR



- LED & Buzzer Indicate Phase Direction
- No Electrical Connection
- Live Wire Check (R-S, S-T)
- Battery Check & Auto Shut Off

#### SPECIFICATIONS

Detection Method:	Electrostatic induction
Voltage Range:	70-600VAC, 50/60Hz
Max. Wire Size:	0.67" (17mm) dia., insulated wire
Standards:	Cat III, 600V
Dimensions:	2.76"W x 2.95"H x 1.18"D
Lead Length:	27" (0.7mm)

#### ORDERING INFORMATION

HK/3120	Voltage Detector, batteries included
HK/3129	Phase Detector, with carrying case & AA batteries
HK/3246	Pencil HiTester, battery included
HK/3280-10	Clamp-On HiTester, with leads, battery & carrying case
HK/3280-20	TRMS Clamp-On HiTester, with leads, battery & carrying case

### VOLTAGE DETECTOR



- Detect AC Voltage in Insulated Wires

#### SPECIFICATIONS

Voltage Range:	70-600VAC, 50/60Hz
Indication:	Red LED and continuous beep
Battery Check:	Green LED
Operating Temperature:	0 to 40 °C, $<80\%$ RH (non-condensing)
Standards:	CAT IV 600V, indoor use
Dimensions:	5.9" L x 0.7" dia (149 x 18.5mm)

### CLAMP-ON HITESTERS



- Slim Body for Easy Clamping in Narrow Spaces
- Independent-opening Double-lever Jaw
- Right or Left Hand Operation
- 4199 Count LCD
- True RMS Measurement (3280-20)

#### SPECIFICATIONS

Function	Range (Accuracy)
AC Amps:	3280-10: 42 / 420 / 1000A (50/60Hz; $\pm 1.5\%$ rdg $\pm 5d$ ), 3280-20: 42 / 420 / 1000A (45-66Hz: $\pm 1.5\%$ rdg $\pm 5d$ ) (40-45Hz or 66Hz-1kHz: $\pm 2.0\%$ rdg $\pm 5d$ )
DC Volts:	420m / 4.2 / 42 / 420 / 600V ( $\pm 1.3\%$ rdg $\pm 4d$ )
AC Volts:	4.2 / 42 / 420 / 600V (50-500Hz, $\pm 2.3\%$ rdg $\pm 8d$ )
Ohms:	420 / 4.2k / 42k / 420k $\Omega$ ( $\pm 2.0\%$ rdg $\pm 4d$ ), 4.2M $\Omega$ ( $\pm 5.0$ rdg $\pm 4d$ ), 42M $\Omega$ ( $\pm 10.0\%$ rdg $\pm 4d$ )
Continuity:	420 $\Omega$ ( $\pm 2.0\%$ rdg $\pm 6d$ ), buzzer $<50\Omega$
Wire Size:	1.3" (33mm) max diameter
Allowable Current:	2000A AC rms max continuous
Overload Protection:	DCV/ACV: 600V DC/AC rms; $\Omega$ /Continuity: 250V DC/AC rms
Operating Temperature:	0 to 40 °C, $<80\%$ RH (non-condensing)
Standards:	CAT III 600V(AC A), CAT II 600V(AC/DC V)
Dimensions:	2.2"W x 6.9"H x 0.6"D

## Hioki Testers

### INFRARED THERMO HITESTER



Also in  
HPK-1 Kit

- Pistol Style with Backlit LCD
- Laser Aiming Marker
- Selectable °F/°C
- Min/Max Function
- Upper/Lower Alarm Settings
- Stores 50 Measurements

◀ **3419-20**

CE

#### SPECIFICATIONS

Measurement Range:	-35 to 500 °C (-31 to 932 °F)
Display Resolution:	0.1 °C (0.2 °F)
Wavelength:	6 to 14 μm
Emissivity:	0.17 to 1.00 by steps of 0.01
Field of View:	8 : 1 distance to spot
Sighting:	Red laser marker, 1 mW (class 2)
Accuracy:	-35.0 to -0.1°C : ± 10 % rdg. ± 2 °C 0.0 to 100.0°C : ± 2 °C 100.1 to 500.0°C : ± 2 % rdg.
Battery (Life):	9V alkaline (80 hrs with laser & backlight off)
Operating Temperature:	0-50°C (32-122°F), <80%RH (non-condensating)
Dimensions:	1.81" × 6.77" × 4.65" (46×172×118 mm)

### LAN TESTER



- Verify Wire Destinations
- Detect Split Pairs
- Measure Cable Length
- Check Wire & Shield Condition

◀ **3665-10**

CE

#### SPECIFICATIONS

Cable Types:	Twisted-pair, 100Ω shielded/unshielded, CAT 3, 4, 5, 5e, 6
Connectors:	RJ-45 plugs
Errors Detected:	Open, short, reversed, transposed, split pairs & miswires
Cable Length:	2-300 m, (6.6-984 ft) with 0.1 m (0.3 ft) resolution
Direction Check:	Up to 21 cables can be identified using the supplied 9690 terminator & optional 9690-01 to 9690-04
Display:	LCD with backlight & beeper
Switch:	Select between meters or feet
Battery (Life):	Two AA (50 hours)
Dimensions:	3.4" × 5.2" × 1.3" (85×130×33 mm)

### PENCIL DMM

CE

▶ **3246**



- Backlit 4199 Count LCD
- Auto or Manual Ranging
- Data Hold, Continuity Beeper
- Pushbutton Penlight

#### SPECIFICATIONS

DC Volts:	420m / 4.2 / 42 / 420 / 600V (±1.3 % rdg ± 4d)
AC Volts (50-500Hz):	4.2 / 42 / 420 / 600V (±2.3 % rdg ±8d)
Ohms:	420 / 4.2k / 42k / 420k / 4.2M / 42MΩ (±2.0 % rdg ±4d), plus diode check
Rating:	CAT III 600 V
Dimensions:	1.2" × 1.0" × 7.2" (31×26×84 mm)

## NEW

### TRMS AC CLAMP METER WITH LEAKAGE



- Measure to 200A TRMS AC
- Leakage with 10μA Resolution
- Recorder/Waveform Output
- Min/Max & Display Hold
- Switchable Filter

◀ **3283**

CE

#### SPECIFICATIONS

AC Amps:	10.00 mA to 200 A, 5 ranges
Accuracy (50/60Hz):	±1.0 % rdg. ±5 dgt. (1.5 % on 200 A range)
Frequency Response:	40 Hz to 2 kHz (on AC Amps)
Frequency Measure:	100.0 or 1000 Hz, 2 ranges (±0.3 % rdg. ±1 dgt.)
Switchable Filter:	180 Hz ±30 Hz /-3 dB
Analog Output:	1 V /f.s, DC or AC mode
Display:	1000 count digital, 35 segment bargraph
Sampling Rate:	2 or 4 times/sec (Slow: 1 time/3 sec)
Crest Factor:	2.5 (1.5 on 200 A range)
Circuit Voltage:	300 V AC rms max. (insulated wire)
Power:	9V battery or AC adapter
Wire Dia.:	Ø 40 mm (1.57") max.
Dimensions:	2.44" × 8.86" × 1.54" (62×225×39 mm)
Rating:	CAT III 300V

### TRMS AC CLAMP METER



- 1000A & 600V TRMS AC
- Ohms, Frequency & Continuity
- Waveform Distortion Check
- Inrush Peak Capture
- Min/Max & Display Hold

◀ **3282**

CE

#### SPECIFICATIONS

AC Amps:	30.00 / 300.0 / 1000 A (±1.0% rdg. ±5 dgt)
AC Volts (50/60Hz):	300.0 / 600 V (±1.0 % rdg. ±3 dgt.)
Frequency Response:	40 Hz to 1 kHz (on AC Amps/Volts)
Frequency Measure:	100.0 or 1000 Hz (±0.3 % rdg. ±1 dgt.)
Resistance Measure:	1k & 10k ranges
Temperature Measure:	-50 to 150 °C (with Probe 9462, sold separately)
Display:	3000 count digital, 35 segment bargraph
Sampling Rate:	2 or 4 times/sec (Slow: 1 time/3 sec)
Crest Factor:	2.5 (1.7 on 1000 A or 600 V range)
Circuit Voltage:	300 V AC rms max. (insulated wire)
Power:	9V battery (45 hours)
Wire Dia.:	Ø 46 mm (1.8") max.
Dimensions:	2.44" × 9.06" × 1.54" (62×230×39 mm)
Rating:	CAT III 1000V, CAT IV 600V

#### ORDERING INFORMATION

HK/3246	Pencil DMM, battery included
HK/3282	TRMS AC Clamp Meter
HK/3283	TRMS AC Clamp Meter & Leakage Tester, with case & strap
HK/3419-20	Infrared Thermo Hitester, with carrying case
HK/3665-10	LAN Tester, with carrying case & 9690 Terminator
HK/HPK-1	HVAC/Electrical Contractor Kit (includes 3120 Voltage Probe, 3280-10 Clamp-on Meter, 3419-20 IR Tester, 3804 DMM)