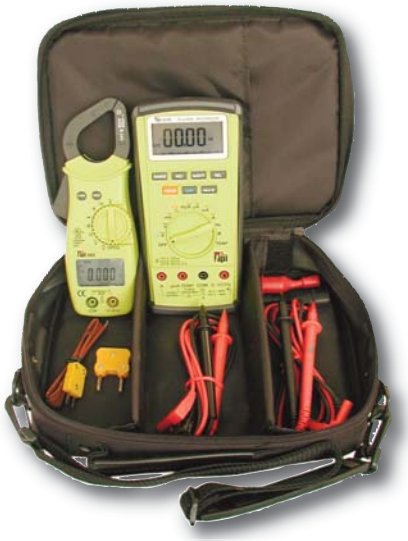
183aC3 HVAC DMM/Clamp Meter Kit

Use the 183aC3 to

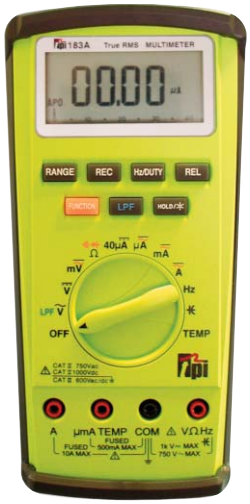
- Trouble shoot ECMs and VFDs.
- Measure duty cycle (% pulse width modulation) on modulating gas valves.
- Test flame sensors.
- Check capacitors.
- Measure temperature rise
- Test thermocouples in furnaces or gas applications.
- Measure heat anticipator current in thermostats.
- Check line and control voltages.
- Test heating element and compressor winding resistance.
- Measure ambient and duct temperatures.



183aC3 Includes: 183a True RMS DMM, 265 Clamp-On Tester, A106 Adapter, GK13M General purpose probe, A085 test lead alligator clips, A040 test lead and A901CP Soft padded case

183a True RMS DMM with capacitance, low-pass filter, duty cycle, and temperature

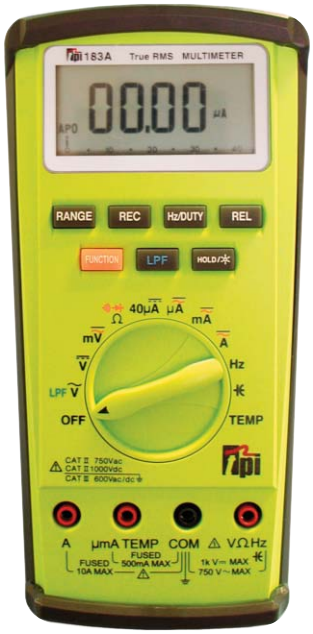
- **True RMS** for more accuracy
- **Duty cycle** (% pulse width modulation) for measuring modulating gas valves
- Measure **temperature** using the in cluded K-type thermocouple probe
- **Low pass filter** for noisy environments
- **Separate fuse and battery compartment**
- **Measure temperature rise (differential) using relative mode:**
  1. Touch the temperature probe to the test point and press REL. This stores the temperature as T1.
  2. Touch the temperature probe to the second test point T2. 183a displays the difference between T1 and T2.
- IR serial interface to use optional A108 data logging software with interface cable



265 Clamp-On Tester with Frequency and Capacitance

- Slim jaw and body design for use in crowded electrical panels
- Measure flame safety control current.
- Test run and start capacitors
- Measure motor run current
- Determine thermocouple voltage
- Test line and control voltages
- Measure heating element resistance

183a True RMS DMM with capacitance, low-pass filter, duty cycle, and temperature



Range Selection	
Auto / Manual	•
Display Specifications	
4000 Count Display	•
6000 Count Dual Display	
Analog Bar Graph	•
Backlight	•
Basic Functions	
AC / DC Volts, AC / DC Amps Resistance, Diode Test Audible Continuity	
Additional Functions	
True RMS, Frequency, Capacitance,Temperature	•
Duty Cycle	•
Data Hold	•
Min / Max Record	•
Relative Mode	•
Active Low Pass Filter Function	•
PC Output	•
Sleep Mode / Auto Off	•
Additional Features	
Frequency Check in Volt Mode	•
Closed Case Calibration	•
Separate Fuse / Battery Access	•
Overmolded Case	
Protective Boot	•

Range & Resolution	
Basic DC Accuracy	0.5%
DC Voltage (maximum)	1000V
Input Impedance	10MΩ
Resolution (maximum)	0.01mV
AC Voltage (maximum)	750V
Input Impedance	10MΩ
Resolution (maximum)	0.01mV
DC Amps (maximum)	10A
Resolution (maximum)	0.01µA
AC Amps (maximum)	10A
Resolution (maximum)	0.1µA
Resistance (maximum)	40MΩ
Resolution (maximum)	0.1Ω
Frequency (maximum)	10MHz
Resolution (maximum)	0.01Hz
Temperature (maximum)	2372°F
Resolution (maximum)	0.1°F
Capacitance (maximum)	4000µF
Resolution (maximum)	0.01nF
Duty Cycle	0.1 to 99.9%
Agency Approval	
CE IEC 61010	CAT II 1000V / CAT III 600V /
cULus 61010	•

Protective Boot

Separate Fuse Compartment

Separate Battery Compartment

Tilt Stand

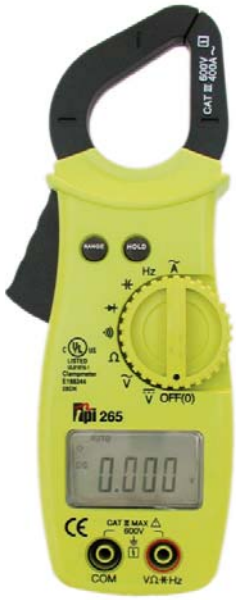
- True RMS DMM
- Duty cycle (% pulse width modulation) for measuring modulating gas valves
- Low pass filter for noisy environments
- Separate fuse (2) and battery compartment
- IR serial interface that can be used to input data to PC with optional A183
- High resolution (0.01) low DC microamp range for measuring flame safety control circuit
- Frequency, capacitance, temperature, data hold, min/max record, relative mode
- AC/DC volts, AC/DC amps, resistance, audible continuity and diode test

Range Selection	
Auto / Manual	•
Display Specifications	
4000 Count	•
Basic Features	
AC Volts	•
DC Volts	•
AC Amps	•
Resistance	•
Diode Test	•
Audible Continuity	•
Additional Features	
Frequency	•
Capacitance	•
Data Hold	•
Sleep Mode / Auto Off	•
Slim Jaw Design	•
Range & Resolution	
Basic DC Accuracy	0.5%
DC Voltage (maximum)	600V
Resolution (maximum)	0.1mV
AC Voltage (maximum)	600V
Resolution (maximum)	0.1mV
AC Amps (maximum)	400A
Resolution (maximum)	0.01A
Resistance (maximum)	40MW
Resolution (maximum)	0.1W
Frequency (maximum)	400MHz
Resolution (maximum)	0.001KHz
Capacitance (maximum)	40000?F
Resolution (maximum)	0.001nF
Agency Approval	
CE IEC 1010	CAT III 600V (Meter) CAT III 600V /400A (Jaw)
cULus	61010-1
Warranty	3 Years

265 Clamp-On Tester with Frequency and Capacitance

TPI offers a full line of digital clamp-on meters for electrical, commercial, HVAC/R, industrial and process control applications

- Slim jaw and body design for use is crowded electrical panels
- Capacitance up to 4,000 micro-farads
- Frequency
- Up to 400 AC amps with 0.01 resolution
- AC/DC volts up to 600
- 0.1 DC millivolt resolution
- Diode, resistance and audible continuity
- CAT III 600V rated
- cULus 61010
- 3-year limited warranty



Applications

- Test start and run capacitors
- Measure motor run current
- Measure heat anticipator current
- Determine thermocouple voltage
- Test line and control voltages
- Measure heating element resistance
- Measure and adjust variable frequency drives