

Tools available in the Business Programs Lending Library:

Tool	What it Measures	Measurement Range	Typical Applications	Mfg. Website
ACR System Inc., Smart Reader 2 Temperature and RH Logger	Temperature (deg. F, deg. C) Humidity (% RH)	-40 to 158 deg. F (-40 to 70 deg. C) 0 to 95% RH	Trending of space temperature and relative humidity.	www.acrsystems.com
ACR System Inc., Smart Reader 3 Temperature and Current Logger	Temperature (deg. F, deg. C) AC Current (Amps)	-40 to 158 deg. F (-40 to 70 deg. C) 0 to 250 Amps	Trending of space temperature and current use of up to 3 circuits.	www.acrsystems.com
ACR PC interface cord & Port Exchanger	N/A	N/A	Accessories for ACR Smart Reader.	www.acrsystems.com
ACR Reference Guide and Software	N/A	N/A	Accessories for ACR Smart Reader.	www.acrsystems.com
Sensor Wires for ACR Temperature and RH Logger (ACR Smart Reader 2)	N/A	N/A	Accessories for ACR Smart Reader.	www.acrsystems.com
Bayview Vending Miser Power Controller	N/A	N/A	Controller with motion detector that turns vending machine off if area next to machine is unoccupied.	www.usatech.com
Bayview SnackMiser Power Controller	N/A	N/A	Controller with motion detector that turns vending machine off if area next to machine is unoccupied.	www.usatech.com
Dent Elite Pro Poly-Phase Power Meter	Electric demand (kW) Voltage (volts) Current (amps) kVAR, kVA, Power Factor Min, Max, Average of above values Electric use (kWh)	0-600 Volts (AC or DC) 50 or 60 Hz UR-04=100A CT (75 hp @ 460V) UR-17=500A CT (400 hp @ 460V) UR-18=500A CT (400 hp @ 460V) UR-19=150A CT (100 hp @ 460V)	Measure electric use for motors, small and medium size commercial/industrial equipment. Obtain kW vs. time electric load profiles.	www.dentinstruments.com
Dent Elite Pro Poly-Phase Power Meter w/ 100A CT's	Electric demand (kW) Voltage (volts) Current (amps) kVAR, kVA, Power Factor Min, Max, Average of above values Electric use (kWh)	0-600 Volts (AC or DC) 50 or 60 Hz 0 to 100 Amps (≤75 hp motor @ 460 V)	Measure electric use for motors, small and medium size commercial/industrial equipment. Obtain kW vs. time electric load profiles.	www.dentinstruments.com
Dent Elite-Pro Poly Phase Power Meter (Kit #7) with 3000A rope CTs	Electric demand (kW) Voltage (volts) Current (amps) kVAR, kVA, Power Factor Min, Max, Average of above values Electric use (kWh)	0 to 3,000 Amps	Measure electric use for motors, large size commercial/industrial equipment. Obtain kW vs. time electric load profiles.	www.dentinstruments.com
EED Watts UP Power Meter	Electric use (kWh) Electric demand (watts) Current, min/max/realtime (Amps) Voltage, min/max/realtime (Volts) Duty Cycles Power Factor	0 to 15 Amps 120 Volt Only Standard 120V outlet plug required	Measure electric use and cost for items with a standard 120 volt electrical outlet plug (e.g., refrigerators, computers, computer monitors, TV's, etc.). No data logging capability.	www.doubled.com
Extech Heavy Duty Light Meter	Lighting level (foot-candles or Lux)	0 to 50,000 Lux 0 to 5,000 foot-candles 3 step ranges for each unit	Measure lighting levels (brightness). Verify have sufficient lighting for task being performed.	www.extech.info

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Fluke True-rms Multi Meter	AC or DC Voltage (Volts) AC or DC Current (Amps) Resistance (ohms) Capacitance (microfarads) Frequency (Hz)	0 to 1,000 volts (AC or DC) 0 to 10 amps (AC or DC) 0 to 40 mega-ohms 0 to 5 microfarads 0 to 200 kHz	Measure various electrical properties. Can also measure temperature with addition of TE-10 or TE-11 temperature probe and higher currents with IE-07, IE-08, IE-11, or IE-12 current clamps.	http://us.fluke.com
Fluke Universal Temperature Probe	Temperature (deg. F, deg. C)	-10 to 160 deg. F (-12 to 70 deg. C)	Used with UI-03 or UI-04 to measure temperature or air or fluids.	http://us.fluke.com
Fluke 240A Clamp-On CT	AC Current (Amps)	0.1 to 240 Amps AC Max of 600 Volts Max of 1 kHz	Used with UI-03 or UI-04 to measure larger currents than what Fluke multi-meter can measure by itself.	http://us.fluke.com
Fluke AC/DC Current Clamp	AC or DC Current (Amps)	0.5 to 1,000 Amps DC 0.5 to 600 Amps AC Max of 600 Volts Max of 400 Hz	Used with UI-03 or UI-04 to measure larger currents than what Fluke multi-meter can measure by itself.	http://us.fluke.com
AEMC 150A AC Clamp on Current Probe (CT)	AC Current (Amps)	50 mA to 150 Amps AC Max of 600 Volts 30 Hz to 10 kHz	Used with UI-03 or UI-04 to measure larger currents than what Fluke multi-meter can measure by itself.	www.aemc.com
HOBO Temperature Data Logger	Temperature (deg. F, deg. C)	-4 to 158 deg. F (-20 to 70 deg. C)	Trending of room temperature.	www.onsetcomp.com
HOBO Relative Humidity Logger	Humidity (% RH)	25 to 95% RH	Trending of room relative humidity.	www.onsetcomp.com
HOBO Motor On/Off AC-Field Sensor-Logger w/User's Manual	Motor run time (hours)	Up to 2,000 state changes Checks for state change every 0.5 sec. Magnetic field threshold 2 gauss	Measure run time of a motor to determine hours of operation for energy efficiency improvements.	www.onsetcomp.com
HOBO PC interface Cord and Version 3.6 Boxcar software	N/A	N/A	Software to use with HOBO loggers.	www.onsetcomp.com
HOBO Voltage Data Logger	DC Voltage (volts)	0 to 2.5 Volts DC		www.onsetcomp.com
HOBO Light Intensity Data Logger	Lighting level (lumens/sq ft)	0.01 to 10,000 lumens/sq ft	Trending of lighting levels. Example: determine if daylighting controls are adjusting lighting levels to proper setpoint.	www.onsetcomp.com
HOBO 1–200A current transformers	Current (Amps)	1 to 200 Amps	Trending of current used by electric motors, cooling equipment, electric panels, etc.	www.onsetcomp.com
Boxcar Pro4 Datalogger Software	N/A	N/A	Software to use with HOBO loggers.	www.onsetcomp.com
BoxCar Pro 4.3 Software CD for HOBO Data Loggers Software & PC Interface Cord	N/A	N/A	Software and PC cord to use with HOBO loggers.	www.onsetcomp.com
Raytheon Nightsight PalmIR 250 Infrared Camera	Converts infrared (heat) to gray scale visual display	N/A (visual display only)	Check electrical panels for loose connections, look for hot/cold spots along exterior walls/windows/doors.	www.palmir250.com
Leviton Light Logger	Occupancy Status, using both occupancy sensor and rapid change in light level	8,192 log entries 1 log entry per 60 seconds	Trending of occupancy status for lighting system	www.leviton.com
PS&T Lighting Logger	Occupancy Status, using rapid change in light level	8,192 log entries 1 log entry per second	Trending of occupancy status for lighting system	www.dentinstruments.com (Dent purchased PS&T)

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PS&T Motor Logger	Motor run time (hours)	Up to 8,192 state changes Checks for state change every 1.0 sec. Magnetic field threshold 40 milliGauss minimum	Measure run time of a motor to determine hours of operation for energy efficiency improvements.	www.dentinstruments.com (Dent purchased PS&T)
PS&T Plug Logger	Electric use (kWh) Electric demand (watts) Current (Amps) Voltage (Volts) Power Factor	0 to 15 Amps 0 to 2,000 watts 120 Volt Only Standard 120V outlet plug required	Measure electric use and cost for items with a standard household-type electrical outlet plug.	www.dentinstruments.com (Dent purchased PS&T)
PS&T Smartlogger RS-232 Interface Cable	N/A	N/A	Accessories for PS&T Smartlogger.	www.dentinstruments.com (Dent purchased PS&T)
Raytek Raynger MX Infrared Thermometer	Surface Temperature (deg. F, deg. C)	-25 to 1,600 deg. F -30 to 900 deg. C	Measure temperature of a surface without making contact with it (example: air temperature out of ductwork without getting ladder)	www.raytek.com
Testo Combustion Analyzer	Carbon Dioxide (CO ₂ , ppm) Carbon Monoxide (CO, ppm) Nitrogen Oxides (NO, ppm) Oxygen (% of volume) Draught/Pressure (mbar) Combustion efficiency (%) Temperature	CO ₂ calculated from Oxygen % 0 to 8,000 ppm CO 0 to 3,000 ppm NO 0-21 % by volume Oxygen ± 80 mbar 0 to 120% Efficient -40 to 2,192 deg. F (-40 to 1,200 deg. C)	Measure performance of boilers, furnaces, water heaters, and other combustion systems.	www.testo.de/US/en
UE Systems Leak Detector	Converts ultrasound noise to audible noise	Ultrasound from 20 to 100 kHz	Measure noise associated with compressed air or vacuum system leaks, failed steam traps, bearing failure, high voltage electrical arcing. When used with ultrasonic noise generator can be used to test air-tightness of windows, doors, etc.	www.uesystems.com
TSI Velocicalc, Hot Wire Anemometer Air Velocity/Humidity Meter	Air velocity (fpm, m/s) Air temperature (deg. F, deg. C) Humidity (% RH, wetbulb, dewpoint) Volume flowrate (cfm, l/s, cu. m ³ /hr)	0 to 6,000 fpm (0 to 30 m/s) 14 to 140 deg. F (-10 to 60 deg. C) 0 to 95% RH 40 to 140 deg. F (5 to 60 deg. C) wetbulb 5 to 120 deg. F (-15 to 49 deg. C) dewpoint 0.2 to 2,700,000 cfm (0.1 to 195,000 l/s, 0.0424 to 702,000 m ³ /hr) volume flowrate	Measure multiple parameters associated with air systems (ductwork or room conditions) in a building.	www.tsi.com
Ultrasonic Flow Meter	Fluid velocity (fps, mps) Volume flow rate (gpm, lpm, m ³ /hr, MGD)	0.5 to 20 fps (0.15 to 6.08 mps) 1 to 120 inch (2.5 to 305 cm) pipe Up to 250 deg. F (121 deg. C) pipe temp.	Non-intrusive measurement of flow rate of fluid in pipe	www.dynasonics.com
STI Industrial Digital Pyrometer Kit	High temperature air	-280 to 2,000 deg. F (-100 to 1,193 deg. C)	Measuring high temperature exhaust air from furnaces, boilers, engine exhaust	www.servicetectonics.com

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USB Serial Connector for HOBO Meters	N/A	N/A	Adapter to convert Serial plug for HOBO meters and other data loggers to USB plug. Newer computers (especially laptops) only have USB plugs, older ones may still have serial plugs.	www.keyspan.com
Kestrel 3000 Wind Meter	Wind speed (m/s, km/hr, mph, fpm, knots) Temperature, wind-chill, heat stress, dewpoint (deg. F, deg. C) Relative humidity (% RH)	0.7 to 89 mph (0.3 to 40 m/s) -20 to 158 deg. F (-29 to 70 deg. C)	Measure wind speed, room/outdoor temperature and humidity. Lower accuracy than hot wire anemometer.	www.nkhome.com