GENERAL®

General Tools & Instruments

2009 New Products Catalog - Instruments

IRT206

GENERAL®
25@200 50@400 75@800 mm
1@8 2@16 3@24 inch
D:S=8:1

GENERAL® ULTRATECH® STAINLESS STEEL

Precision, Specialty & Innovation

NIPC09

TABLE OF CONTENTS
NEW INSTRUMENT PRODUCTS

FEATURES **SPECIFICATIONS**

ALL-IN-ONE DELUXE MOISTURE METER KIT COMPLETE WITH PIN-TYPE AND NON-INVASIVE ROLLER-TYPE PROBES

Precision digital moisture meter for highly accurate readings in wood, timber and many other materials.

- Digital LCD display with luminescent back-light
- Protective cap for safe carrying and operation
- Hardened gloss treatment on display-window for an abrasion-proof long-term clean lens
- 5.5% to 99.9% moisture range with DC 0~1V output
- Stores up to 99 readings, Max/Min average values recalled
- Auto temperature compensation and internal calibration
- Auto power off
- Ergonomic design, comfortable and durable
- Easy operation
- CE and RoHS approved
- Audible and visual low battery warning
- Interchangeable extension probes

♦ Measuring Range: 5.5 to 99.9% H_2O% WME
♦ Resolution: 0.1%
♦ Accuracy: (at 25ºC) ±1% Wood scale
♦ Display: Digital dual LCD display, with multi-function indicator
♦ Sampling Rate: 0.3 seconds
♦ Wood Group Scales: Select from 8 wood species groups
♦ Data Memory: 99 readings
♦ Signal Output: Analog DC 0 ~ 1V (10 mV/1%), load >500V
♦ Calibration: Built-in calibration adjustment
♦ Power: About 250 hours for continuing use (without back-light)
♦ Operating: -4º to 122ºF (-20º to 55ºC), <90%RH, non-condensing
♦ Dimensions/Weight: 6.0"(L) x 2.2"(W) x 1.26"(D) (153 x 56 x 32mm) 5.5oz (155g) including battery

Kit includes: 1 each
- **MM70D** Precision LCD Moisture Meter with Interchangeable Pin-Type Probes
- **MP7021** External Interchangeable Pin-Type Probe
- **MP7022** External Roller-Type Probe
- Additional Set of Extension Pins
- User's Manual • 1 "9V" battery

UPC	NO.	LIST PRICE
01292 5	**MM70D-7022KIT**	$499.95

MM70D-7022KIT

MP7021

MP7022

MM70D

PROFESSIONAL WOOD AND CONSTRUCTION MOISTURE METER

Use to measure moisture content in wood, timber, concrete and other construction materials.

- Detects moisture in soft construction materials such as gypsum or plaster and wood
- Easy to use
- Ergonomic design
- Illuminated LCD with bar graph display
- Measured value can be read quickly from the large clear dual scale
- Protective cap with self-test function
- Auto power off
- Low battery display

♦ Range/Accuracy: Wood: 0 - 44% / ±2% Other materials: 0.2 to 2.2% / ±0.4%
♦ Operating Environment: 32º to 104°F (0° to 40°C), RH: <85%
Includes: • 1 "9V" battery
          • Instruction Manual

UPC	NO.	LIST PRICE
01306 9	**MM80G**	$69.99

MM80G

Temperature - RH Data Loggers/IAQ Monitor

GENERAL®

| FEATURES | SPECIFICATIONS |

DTH184DL

HIGH ACCURACY DATA LOGGING THERMO-HYGROMETER

1% RH accuracy and large red LED display makes it ideal for process control, labs and other critical areas.

- Dual LCD Display
- Displays both Temperature and RH
- Measures both °F/°C
- Real time data
- Data Hold Function
- Alarm Function
- Dew-Point and Wet-Bulb Temperature
- USB PC interface

Includes: • Instruction Manual
- 1 "9V" battery
- Carrying Case
- MINI USB 4P (MALE) to USB A Type cable
- CD Software

♦ Temperature -4° to 140ºF (-20° to 60ºC) ±1.8ºF (0.5ºC) (32° to 104ºF / 0° to 40ºC) ±3.6ºF (2ºC) (other)
♦ Humidity: 5 to 95%, 1% RH (15 to 80%RH) 2.5% (other)
♦ Temperature sensor: Diode
♦ Humidity Sensor: Capacitor Sensor
♦ Sampling: 1 times/second
♦ Power source: 1 "9V" battery or AC to DC Adapter (9V/300mA)
♦ Resolution: 0.1% RH 0.1°F, 0.1°C
♦ Size: 5.1"(L) x 2.2"(W) x 1.5"(D) (130 x 56 x 38mm)
♦ Weight: 8.8oz (250g)
♦ Operating Temperature and Humidity: -4° to 140ºF (-20° to 60ºC), <95% RH (non-condensing)
♦ Storage Temperature and Humidity: 14° to 140ºF (-10° to 60ºC), <70% RH (non-condensing)
♦ Consumption Current:10 mA

UPC	NO.	LIST PRICE
01315 1	DTH184DL	$1,299.00

LTH8809DL

TEMPERATURE / HUMIDITY MONITOR – DATA LOGGER

Unque, large red LED display makes it ideal for monitoring temperatures and humidity conditions in labs, incubators and other controlled environments.

- Complete environmental monitor and alarm
- Wall or Desk Mounted LED type, easy reading
- Alarm set for Hi and Low limit-Temperature and Humidity
- Air Temperature or Dew Point(DP) display and C/F Unit display are selectable
- Data Logging Capacity 16,000 records
- USB interface

♦ RH %: 0.0~100.0%
♦ RH resolution: 0.1%
♦ RH accuracy: ±3% at 10 to 90%, ±5% other
♦ Temperature: -4° to 158ºF (-20° to 70ºC)
♦ Temp. resolution: 0.1ºF (0.1ºC)
♦ Temp. accuracy: ±1.2ºF (±0.6ºC)
♦ Memory: 16,000 (Temp: 8K, RH: 8K)
♦ Power source: 4 "AA" batteries (included)
♦ LED display: 2" x 2.6" (50.9 x 65.5mm)
♦ Dimensions: 4.8"(L) x 5.2"(W) x 1.6"(D) (120 x 130 x 42mm)
♦ Weight: 7.4oz (210g)
Includes: • Operation manual • USB cable • Software • 4 "AA" batteries

UPC	NO.	LIST PRICE
01309 0	LTH8809DL	$249.95

CDM77232

HIGH ACCURACY TEMPERATURE / HUMIDITY & IAQ MONITOR WITH OUTPUT RELAY

IAQ monitoring and ventilation control.

- Digital wall mountable / desktop type
- Visible and audible CO_2 warning alarm
- NDIR (Non-Dispersive Infrared) Waveguide Technology with ABC (Automatic Background Calibration)
- Tripple Display of CO_2 Level, Temperature and Humidity
- TWA (8 Hour Weighted Average)
- STEL (15 Minute Weighted Average)
- Alarm output for ventilation control
- PC connect via RS232 interface

♦ CO_2 range: 0~5000ppm
♦ CO_2 accuracy: ±30ppm or ±5% reading
♦ Temp. range: 14° to 140ºF (-10° to 60ºC)
♦ Temp. accuracy: ±0.9ºF / ±0.6ºC
♦ RH range: 0% to 85%
♦ RH accuracy: ±3% (10 to 90%) ±5% (others)
♦ Dew Point Temp.: -100° to 140ºF (-73.4° to 60ºC)
♦ Wet Bulb Temp.: 8° to 140ºF (-13.3° to 60ºC)
♦ Warm-up time: ≦30 seconds
♦ Power: AC Adapter (included)

UPC	NO.	LIST PRICE
01311 3	CDM77232	$399.95

ALWAYS WEAR OSHA APPROVED SAFETY GOGGLES

FEATURES **SPECIFICATIONS**

BRIGHT RED JUMBO DISPLAY DATA LOGGING LED TEMPERATURE/HUMIDITY MONITOR

Ideal for temperature, humidity monitoring, and control in lab, computer rooms, clean rooms, and other critical areas.

- Complete environmental monitor and alarm
- Wall-Mounted, LED type, easy reading
- Alarm set for Hi and Low limit-Temperature and Humidity
- Data Logging Capacity 30,000 records
- LED displays real time data
- USB interface

UPC	NO.	LIST PRICE
01312 0	**LRTH185DL**	$899.00

♦ Temperature range: -4° to 140°F (-20° to 60°C)
♦ Temp. accuracy: ±1.8°F (1.0°C), (23° to 104°F / -5.0° to 40.0°C); ±3.6°F (2.0°C) (other)
♦ Temp. resolution: 0.1°F (0.1°C)
♦ Temp. update rate: times/second
♦ Temp. sensor type: Diode
♦ RH range: 5% to 95%
♦ RH accuracy: ±2.0%RH (at 25°C, 35% to 80%RH). ±2.5% (at 25°C, 10% to 35%RH, 80% to 90%RH) other ±5.0%RH (at 25°C), <10%RH, >90%RH)
♦ Relative Humidity resolution: 0.1 RH
♦ Relative Humidity response time: below 4 seconds
♦ LED display: 8.4"(W) x 4.73"(H) (214 x 120mm)
♦ Power supply: AC to DC Adapter (9V/1A)
♦ Battery backup: 1 "9V" battery enables continued measuring during power disruptions
♦ Size: 10.2"(L) x 7"(W) x 1.9"(D) (260 x 178 x 47mm)
♦ Weight: 35.3oz (1000g)

LRTH185DL

WIRELESS RAIN GAUGE WITH THERMOMETER AND CLOCK

Ideal for weather monitoring rainfall, indoor/outdoor temperatures, ice warning and more.

- Wireless transmission of the temperature from the remote temperature sensor to the main unit up to 100 feet (30 meters) away
- Rainfall may be displayed in inches or mm
- Programmable Rain Alarm
- 7 days of rain collection history
- Built-in rain gauge installation level
- Indoor and remote temperature display
- MIN/MAX memory for indoor/outdoor temperature
- Hourly, daily and weekly rainfall history
- Monitors temperature in up to 3 remote locations
- Quartz clock with calendar
- Programmable Time Zones
- Day of the week in English, German, French, Spanish or Italian
- Dual crescendo alarm with snooze
- Programmable Ice Warning Alarm
- Wall mount or desktop option
- Low battery indicator
- LED backlight

♦ **MAIN UNIT**
♦ **TIME:**
   12/24 hour display in hh:mm format
   Date format: month-day or day-month format
   Day of the week is selectable in five languages: English, Spanish, French, German, Italian
   Time zone manual adjustment
   Dual two-minute crescendo alarms with 8 minutes snooze
   Programmable ice warning alarm (Channel 1)
♦ **WEATHER**
   Rainfall:
   Proposed operating range: 0 to 78.74" (0 to 1999.9mm)
   Rainfall resolution: 0.04 inch (1mm)
   Indoor Temperature
   Proposed operating range: 23.0° to 122.0°F (-5.0° to 50.0°C)
   Temperature resolution: 0.2°F (0.1°C)
   User-selectable (°F or °C) temperature display
   LED backlight
   Low battery indicator
   Wall Mount or Desktop option
♦ **REMOTE RAIN GAUGE**
   Remote Rainfall Data
   Proposed operating range: 23.0° to 122.0°F (-5.0° to 50.0°C)
   RF transmission frequency: 433 MHz
   RF transmission range: maximum 100 feet (30 meters)
   Rainfall transmission cycle: approximately 183 seconds

♦ **REMOTE TEMPERATURE SENSOR**
   Remote Temperature
   Proposed operating range with alkaline batteries: -4.0° to 158°F (-20.0° to 70.0°C)
   Proposed operating range with lithium batteries: -38.0° to 158°F (-38.8° to 70.0°C)
   Temperature resolution: 0.2°F (0.1°C)
   Low battery indicator
   RF transmission frequency: 433 MHz
   Maximum number of remote sensors: 3 (1 included)
   RF transmission range: maximum 100 ft (3m)
   Temperature transmission cycle: approximately 45 seconds
♦ Power
   Main unit: 2 "AA" batteries (not included)
   Remote sensor: 2 "AA" batteries (not included)
   Remote rain gauge: 2 "AA" batteries (not included)
♦ Dimensions
   Main unit: 2.75"(L) x 5.43"(H) x 1.02"(D)
   Remote sensor: 2.37"(L) x 4"(H) x 1"(D)
   Remote rain gauge: 6.49"(L) x 6.89"(H) x 4.72"(D)

UPC	NO.	LIST PRICE
01273 4	**RGR150**	$69.95

GENERAL ®

FEATURES   SPECIFICATIONS

WIRELESS DATA LOGGING WEATHER STATION

Wireless transmission of outdoor temperature, humidity, quantity of rainfall, wind velocity and direction from the exterior sensors to the display station (433 MHz). Long–distance range up to (100 m) free field.

WS831DL

- Wireless transmission of outdoor temperature, humidity, quantity of rainfall, wind velocity and direction from the exterior sensors to the display station (433 MHz), long-distance range up to 325' (100m) free field
- Expandable up to 5 outdoor temperature/humidity transmitters, also for the climate control of remote rooms, e.g. children's room, wine-cellar, greenhouse
- Indoor temperature and humidity with comfort level indicator of indoor climate
- Weather forecast with symbols and tendency of atmospheric pressure
- Absolute and relative atmospheric pressure with 24 hours history
- Bar graph indication of atmospheric pressure, temperature or humidity for the last 24 hours
- Radio controlled clock with different alarms and snooze functions
- Display of date and weekday (6 languages)
- Time of rising and setting of sun and moon
- Indication of moon phase
- Wind chill factor and dew point
- Programmable alarm functions for weather conditions, like temperature alarm, storm warning
- Maximum and minimum values
- LED Back-light with light sensor (in continuous operation with power adapter)
- For wall mounting or table standing
- Data logging software (Weather View PC) and cable included

♦ Radio Frequency: 433 MHz
♦ RF Reception range: 100-328 feet (30 -100 m)
♦ Barometric Pressure
  Measuring Range: 14.75 inHg to 32.44 inHg (500 Hpa to 1100Hpa); (374.5 mmHg to 823.8 mmHg)
  Resolution: 0.003 inHg (0.1 Hpa, 0.08 mmHg)
  Accuracy: 0.015 inHg (5 Hpa; 0.38 mmHg)
  Sampling interval: 20 minutes
  Sea level Altitude Compensation Range: -657 ft to 16404 ft (-200 m to +5000 m)
♦ Temperature (Indoor)
  Range: 14.2° to 140°F (-9.9° to 60°C)
  Resolution: 0.2°F (0.1°C)
  Accuracy: 2°F (1°C)
  Sampling Interval: 10 seconds
♦ Temperature (remote)
  Range: -40° to 176°F (-40° to 80°C)
  Resolution: 0.2°F (0.1°C) Accuracy: 2°F (1°C)
  Transmitting Interval: around 47 seconds
♦ Humidity (Indoor)
  Range: 30% to 80%
  Resolution: 1%   Accuracy: 5%
  Sampling Interval: 10 seconds
♦ Humidity (Outdoor)
  Range: 30% to 80%
  Resolution: 1%
  Accuracy: 5%
  Sampling Interval: 10 seconds
  Transmitting Interval: around 47 seconds
♦ Wind Direction
  Range: 0° to 360°
  Resolution: 22.5°
  Accuracy: 11.25°
  Starting Threshold: 3mph (4.8 Km/h)
  Transmitting Interval: 33 seconds
♦ Wind Speed
  Range: 0 to 199.9mph (199.9 Km/h, 173.7 Knots, 89.3 m/s)
  Resolution: 0.1mph (0.16 Km/h)
  Accuracy: (2mph + 5%)
  Starting Threshold: 3mph (4.8 Km/h)
  Wind/Gust Speed Display Update Interval: 33 seconds
  Wind/Gust Sampling Interval: 11 seconds

♦ Rainfall
  1h/24h/yesterday range:
  0 to 78.73" (0 to 1999.9mm)
  Last week/ last month range:
  0 to 787.3" (0 to 19999mm)
  Resolution: 0.03 inch (0.6578mm)
  Accuracy: ±5% ±0.03" (±5% ±0.6875mm)
  Transmitting Interval: 183 seconds
♦ Hardware Requirement for WeatherView PC software
  Operating System:
  Windows 98/NT/2000/ME or XP
  Memory size: Ram 128 MB or more
  Hard disk size: 100 MB free space or more
  Media Device: 1 x CD-Rom drive
  Available serial USB port
♦ Power source: Total of 10 "AA" batteries
  MAIN UNIT:
  4 "AA" batteries;
  7.5V AC/DC power adaptor
  (200mA; center pin positive)
  REMOTE THERMO HYGROMETER:
  2 "AA" batteries each
  REMOTE ANEMOMETER:
  2 "AA" batteries
  REMOTE RAIN GAUGE:
  2 "AA" batteries
♦ Weight (without batteries)
  Main unit: 8.15oz (231g)
  Remote Thermo-Hygrometer: 2.29oz (65g)
  Remote Anemometer: 11.12oz (315g)
  Remote Rain Gauge: 10.24oz (290g)
♦ Dimensions
  Main unit: 7.31"(L) x 5.39"(H) x 1.26"(D)
         (185.8 x 136.9 x 32mm)
  Remote Thermo - Hygrometer:
  2.37"(L) x 4"(H) x 1"(D) (60 x 101 x 25mm)
  Remote Anemometer:
  19.16"(L) x 19.16"(H) x 15.35"(D)
  (486.6 x 486.6 x 390mm)
  Remote Rain Gauge:
  6.49"(L) x 6.89"(H) x 4.72"(D)
  (165 x 175 x 119mm)

UPC	NO.	LIST PRICE
01298 7	**WS831DL**	$249.99

GENERAL ®

FEATURES   SPECIFICATIONS

PROFESSIONAL WIRELESS WEATHER STATION

Wireless monitoring of weather condition: indoor/outdoor temperature, humidity, rainfall, wind speed, barometric pressure and many more.

- Wireless transmission of outdoor temperature, humidity, quantity of rainfall, wind velocity and direction from the exterior sensors to the display station (433 MHz), long-distance range up to 325' (100m) free field
- Expandable up to 5 outdoor temperature/humidity transmitters, also for the climate control of remote rooms, e.g. children's room, wine-cellar, greenhouse
- Indoor temperature and humidity with comfort level indicator of indoor climate
- Weather forecast with symbols and tendency of atmospheric pressure
- Absolute and relative atmospheric pressure with 24 hours history
- Bar graph indication of atmospheric pressure, temperature or humidity for the last 24 hours
- Radio controlled clock with different alarms and snooze functions
- Display of date and weekday (6 languages)
- Time of rising and setting of sun and moon
- Indication of moon phase
- Wind chill factor and dew point
- Programmable alarm functions for weather conditions, like temperature alarm, storm warning
- Maximum and minimum values
- LED Backlight with light sensor (in continuous operation with power adapter)
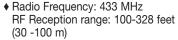- For wall mounting or table standing

Contents:
Display Station
  • Power Source: 4 "AA" batteries (not included)
  • Power adapter 7.5 V AC/DC
Thermo-Hygro Sensor
  • Power Source: 2 "AA" batteries (not included)
Wind Sensor
  • Power Source: 2 "AA" batteries (not included)
  • Mounting material
Rain Sensor
  • Power Source: 2 "AA" batteries (not included)
  • Mounting material

- Radio Frequency: 433 MHz
  RF Reception range: 100-328 feet (30 -100 m)
- Barometric Pressure
  Measuring Range: 14.75 inHg to 32.44 inHg (500 Hpa to 1100Hpa); (374.5 mmHg to 823.8 mmHg)
  Resolution: 0.003 inHg (0.1 Hpa, 0.08 mmHg)
  Accuracy: 0.015 inHg (5 Hpa; 0.38 mmHg)
  Sampling interval: 20 minutes
  Altitude Compensation Range: -657 ft to 16404 ft (-200m to +5000 m)
- Temperature (Indoor)
  Operating Range: 14.2° to 140°F (-9.9° to 60°C)
  Resolution: 0.2°F (0.1°C)
  Accuracy: 2°F (1°C)
  Sampling Interval: 10 seconds
- Temperature (remote)
  Range: -40° to 176°F (-40° to 80°C)
  Resolution: 0.2°F (0.1°C)
  Accuracy: 2°F (1°C)
  Transmitting Interval: around 47 seconds
- Humidity (Indoor)
  Operating Range: 0% to 99%
  Resolution: 1%
  Accuracy: 5%
  Sampling Interval: 10 seconds
- Humidity (Outdoor)
  Operating Range: 0% to 99%
  Resolution: 1%
  Accuracy: 5%
  Sampling Interval: 10 seconds
  Transmitting Interval: around 47 seconds
- Wind Direction
  Range: 0° to 360°
  Resolution: 22.5°
  Accuracy: 11.25°
  Starting Threshold: 3mph (4.8 Km/h)
  Transmitting interval: 33 seconds

WS821

- Wind Speed
  Range: 0 to 199.9mph (199.9 Km/h, 173.7 Knots, 89.3 m/s)
  Resolution: 0.1mph (0.16 Km/h)
  Accuracy: (2mph + 5%)
  Starting Threshold: 3mph (4.8 Km/h)
  Wind/Gust Speed Display Update Interval: 33 seconds
  Wind/Gust Sampling Interval: 11 seconds
- Rainfall
  1h/24h/yesterday range: 0 to 78.73" (0 to 1999.9mm)
  Last week/ last month range: 0 to 787.3" (0 to 19999mm)
  Resolution: 0.03" (0.6578mm)
  Accuracy: ±5% ±0.03" (±5% ±0.6875mm)
  Transmitting Interval: 183 seconds
- Power source: Total of 10 "AA" batteries
  MAIN UNIT: 4 "AA" batteries; 7.5V AC/DC power adaptor (200mA; center pin positive)
  REMOTE THERMO HYGROMETER: 2 "AA" batteries
  REMOTE ANEMOMETER: 2 "AA" batteries
  REMOTE RAIN GAUGE: 2 "AA" batteries
- Weight (without batteries)
  Main unit: 8.15oz (231g)
  Remote Thermo-Hygrometer: 2.29oz (65g)
  Remote Anemometer: 11.12oz (315g)
  Remote Rain gauge: 10.24oz (290g)
- Dimensions
  Main unit: 7.31"(L) x 5.39"(H) x 1.26"(D) (185.8 x 136.9 x 32 mm)
  Remote Thermo - Hygrometer: 2.37"(L) x 4"(H) x 1"(D) (60 x 101 x 25mm)
  Remote Anemometer: 19.16"(L) x 19.16"(H) x 15.35"(D) (486.6 x 486.6 x 390mm)
  Remote Rain gauge: 6.49"(L) x 6.89"(H) x 4.72"(D) (165 x 175 x 119mm)

UPC	NO.	LIST PRICE
08210 2	**WS821**	$199.95

FEATURES

SPECIFICATIONS

DCS1500

DATA LOGGING VIDEO BORESCOPE SYSTEM

Portable, hand-held, complete Borescope System with monitor, camera and video especially designed for the repair industry, the Video Borescope can offer a totally different working experience. It enables team discussion while outputting the image to a TV monitor, and even allows better communication with the customers.

- 0.2" (5.5mm) diameter camera-tipped probe easily fits through the spark plug hole of any engine
- 4 super-strength white LED lights inside the tip
- IP57-Water, oil and dust proof; scratch resistant
- Optimized illumination
- Rapid assembly of lens module
- Illumination intensity easily adjusts to environment
- 3.5" (89mm) extra-wide TFT monitor

♦ Display: 3.5" TFT LCD Monitor
♦ Interface: Mini USB1.1 / AV out
♦ Power: Rechargeable Li-Polymer battery 3.7V
  • AC 100-240V 50-60Hz Power consumption DC5.5 1.8A
♦ Video Output: NTSC and PAL
♦ Recording: MPEG4
♦ Still image storage: JPEG (640x480)
♦ Video recording format: ASF (320x240)
♦ Language: English + option (one language)
♦ S/N ratio: 42dB
♦ Exposure: Automatic
♦ Light Source: 4 white LED
♦ Field of View: 67°
♦ Working/Storage temperature: -4° to 140°F (-20° to 60°C)

The complete kit includes: Charger, lens module cable 3.3 ft (1m), SD 512M memory card, 30°, 45° and 60° mirrors, USB to 5-pin mini-B cable, video cable, cleaning cloth, cotton swabs, instructions, heavy duty carrying case.

Optional DCS1500 Probes:

P1500-1	3.3 ft (1m)	Soft Metal	Diam. 5.5mm	$ 690.00
P1500-2	6.6 ft (2m)	Soft Metal	Diam. 5.5mm	$ 825.00
P1500-3	9.8 ft (3m)	Soft Meta	Diam. 5.5mm	$1,035.00
P1500-5	16.4 ft (5m)	Soft Metal	Diam. 5.5mm	$1,380.00
P1500-10	32.8 ft (10m)	Soft Metal	Diam. 5.5mm	$1,897.50
P1500-30	99.4 ft (30m)	Soft Metal	Diam. 5.5mm	$4,485.00

UPC	NO.	LIST PRICE
70150 8	**DCS1500**	$1,499.00

HIGH PERFORMANCE DATA LOGGING VIDEO BORESCOPE SYSTEM

Portable, hand-held, complete Borescope System with monitor, camera and video.

DCS1600

- Bright TFT Display
- Revolutionary mobility, no need to transport large multiple components
- Compact, palm-sized unit includes LED light source, TFT (Thin Film Transistor) display, camera and recorder
- Takes still photos and dynamic video in real time
- Internal SD memory allows user to save a whole video and output later
- TV monitor output, Computer USB output
- Data logging function
- Multiple mirrored viewing tips and extra wide view angle
- Multiple video formats compatible with most software including Windows® Media Player
- No special software required
- Rechargeable batteries can record for 4 hours
- Comes with a 3.3 ft (1m) long obedient probe that retains the required shapes
- 0.2" (5.5mm) diameter camera-tipped probe easily fits through the spark plug hole of any engine
- 4 super-strength white LED lights inside the tip
- Insert tube is resistant to water, oil, dust, gasoline, and scratches
- Optimized illumination
- Rapid assembly of lens module
- Illumination intensity easily adjusts to environment
- 3.5" (89mm) extra-wide TFT monitor

♦ 5.5mm Diameter Insert Tube 325(H) 250(V)
♦ Housing: Steel
♦ Light Source: White LED
♦ Length: 1m 2m 3m (up to 30m)
♦ Field of View:
  Horizontal field angle: 46°
  Vertical field angle: 34°
  Diagonal field angle: 56°
♦ Depth of field (DOF): 1cm ~ 6cm
♦ Working Temperature: 0° to 55°C

CONSOLE
♦ Power: Rechargeable Li-Polymer battery 3.7V
  • AC 100-240V 50-60Hz Power consumption DC5.5 1.8A
♦ Display: 3.5 TFT LCD QVGA
♦ Recording Medium: 1G SD CARD (up to 2G)
♦ Video Out Format: NTSC & PAL

UPC	NO.	LIST PRICE
01305 2	**DCS1600**	$1,599.00

The complete kit includes: Charger, lens module cable 3.3 ft (1m), SD memory card, 30°, 45° and 60° mirrors, USB to 5-pin mini-B cable, video cable, cleaning cloth, cotton swabs, instructions, hard blow mold case.

Optional DCS1600 Probes:

P1618-1SR	3.3 ft (1m)	Obedient	Diam. 5.5mm	$1,091.58
P1618-2SR	6.6 ft (2m)	Obedient	Diam. 5.5mm	$1,135.05
P1618-3SR	9.8 ft (3m)	Obedient	Diam. 5.5mm	$1,188.18
P1618-1SM	3.3 ft (1m)	Soft Metal	Diam. 5.5mm	$1,043.28
P1618-3SM	9.8 ft (3m)	Soft Metal	Diam. 5.5mm	$1,139.88
P1618-5SM	16.4 ft (5m)	Soft Metal	Diam. 5.5mm	$1,236.48
P1618-10SM	32.8 ft (10m)	Soft Metal	Diam. 5.5mm	$1,477.98
P1618-30SM	98.4 ft (30m)	Soft Metal	Diam. 5.5mm	$2,443.98

Data Logging Video Borescopes

FEATURES

SPECIFICATIONS

VIDEOFLEX™ DATA LOGGING VIDEO BORESCOPE

Compact Video Inspector – visual inspection of difficult accessibly areas.

- The camera head at a flexible fibrescope transfers pictures directly to a LCD-Monitor
- The camera indicates what is behind or in objects, walls circuits or cables etc. even under worst light conditions, due to the LED-lighting
- Waterproof camera head and cable
- The compact device can be used everywhere
- Diversified application with 1m flex fibre-scope which can be prolonged up to 2m
- Extraneous light reduction: contrasty LC-Display which provides an optimum display even under light irridation
- Multilingual On-Screen-Display
- Ideal for difficult accessibly areas due to the very small measuring head
- REC-Function: the exposures can be recorded on the integrated SD-Card for a later analysis
- Formattable SD-Card
- USB 2.0 Interface for PC

♦ Camera Head: <.7" (17mm), waterproof, IP67
♦ Camera Focus: 1.97" (50mm)
♦ Screen Type: 3" (76mm) LCD
♦ Resolution: Display - 320 x 240 pixels
♦ Resolution: Picture - 1280 x 960 pixels
  Video - 640 x 480 pixels
♦ Format: Picture - JPEG / Video - AVI
♦ Display Lighting: 5 luminosity degrees LED: 3 luminosity degrees
♦ Zoom: 3 x digital zoom in 10% steps
♦ Memory: 1GB SD-Card (max. 2 GB)
♦ Interface: USB 2.0
♦ Auto Shut Off: 5 minutes
♦ Power Source: 4 "AA" batteries (included); Can also use rechargeable batteries
♦ Weight: Including batteries and flexible probe 26oz (.740g)
Includes: • 4 "AA" batteries
  • P700-1 3.3 ft (1m) Obedient probe 17mm diameter

DCS700

The complete kit includes: Main unit, 3.3 ft (1m) camera probe, SD memory card, instructions, batteries and case.

UPC	NO.	LIST PRICE
01307 6	**DCS700**	$699.00

Optional DCS700 Probes:

P700-1	3.3 ft (1m)	Obedient probe	17mm diameter	$149.39
P700-2	6.6 ft (2m)	Obedient probe	17mm diameter	$175.95
P700X	3.3 ft (1m)	Obedient extension	17mm diameter	$ 70.38

WIRELESS DATA LOGGING VIDEO BORESCOPE

Portable, hand held, complete Borescope System with monitor, camera, video and wirelss transmission.

- Operate the instrument anywhere without the cable. An image can be sent to a larger screen up to 798 ft (30m) away
- Three different application modes (on console, on large screen, and projected) allow wide application
- Completely Portable - no need for an external light, power or screen
- 3 Operating Modes - includes Hands-Free, One-Handed and Two-Handed modes
- Rapid imaging - Record still images or MPEG 4 compatible streaming video at the touch of a button
- High quality metal lens sleeve can withstand high temperatures and provides protection of the lens module

The complete kit includes: Main monitor, 3.3 ft (1m) camera probe, SD memory card, instructions and waterproof blow mold carrying case.

CAMERA SYSTEM & INSERT TUBE
♦ Diameter of Insert tube: 0.2" (5.5mm)
♦ Resolution: 325(H), 250(V)
♦ Housing: Steel
♦ Light Source: White LED
♦ Length: 39.4" (1m)
♦ Field of View:
  Horizontal field angle: 46°
  Vertical field angle: 34°
  Diagonal field angle: 56°
♦ Depth of Field (DOF): 0.4" to 2.4" (1cm to 6cm)
♦ Insert tube is resistant to water, oil, dust, gasoline and scratches
♦ Working Temperature: -4° to 140°F (-20° to 60°C)

CONSOLE
♦ Dimensions:
  5.5" x 1.4" x 1.3" (139 x 35 x 32mm)
♦ Weight: 7.8oz (220g)
♦ Wireless Transceiver Frequency: 2.4GHz
  • 4 channels (2414MHz 2432MHz 2450MHz 2468MHz)
♦ Battery: Rechargeable Li-Polymer battery 3.7V
♦ Brightness Control: Variable
♦ Audio: Integrated microphone

SYSTEM
♦ System Dimensions: 5.8"(W) x 4.1"(H) x 2.8"(D) (146.9 x 105.4 x 71mm)
♦ System Weight: 11.8oz (0.335kg)
♦ Power: Battery - Rechargeable Li-Polymer battery 3.7V
  Power supply - AC l 00-240V 50-60Hz
  Power consumption - DC5.5 I.8A
♦ Display: 3.5 TFT LCD QVGA

DCS1800

♦ Recording Medium: 1G SD CARD (up to 2G)
♦ Video Out Format: NTSC & PAL
♦ Interface: AV Out
♦ Wireless Receiver Frequency: 2.4GHz
  • 4 channels (2414MHz, 2432MHz, 2450MHz, 2468MHz)
♦ Compression Format: Compliant with MPEG4
♦ Still Image Storage Format: jpeg (640 x 480)
♦ Frame Rate: ~30 fps ♦ White Balance: Fixed
♦ Exposure: Automatic
♦ S/N Ratio: 42dB or more
♦ Languages: English, German, French, Portuguese
♦ Operating Environment: -4° to 140°F (-20° to 60°C)
♦ Storage Environment: -4° to 140°F (-20° to 60°C)
♦ Recharge Environment: 32° to 104°F (0° to 40°C)

Optional DCS1800 Probes:

P1618-1SR	3.3 ft (1m)	Obedient	Diam. 5.5mm	$1,091.58
P1618-2SR	6.6 ft (2m)	Obedient	Diam. 5.5mm	$1,135.05
P1618-3SR	9.8 ft (3m)	Obedient	Diam. 5.5mm	$1,188.18
P1618-1SM	3.3 ft (1m)	Soft Metal	Diam. 5.5mm	$1,043.28
P1618-3SM	9.8 ft (3m)	Soft Metal	Diam. 5.5mm	$1,139.88
P1618-5SM	16.4 ft (5m)	Soft Metal	Diam. 5.5mm	$1,236.48
P1618-10SM	32.8 ft (10m)	Soft Metal	Diam. 5.5mm	$1,477.98
P1618-30SM	98.4 ft (30m)	Soft Metal	Diam. 5.5mm	$2,443.98

UPC	NO.	LIST PRICE
01297 0	**DCS1800**	$1,899.00

FEATURES   **SPECIFICATIONS**

UV512C

DIGITAL UVC METER

This instrument is designed to measure ultraviolet light in the range from 220 to 275 nanometers (UVC). The illumination range of the meter allows users to conduct the most precise quantitative measurements of ultraviolet radiation: radiometry and laboratory requirements, UV-curing in off-set printing, lamp UV intensity & aging, industrial process monitoring, germicidal semiconductor fabrication, sunlight UV intensity to prevent skin damage, sterilization and environmental monitoring.

- Backlit LCD with 4 Digit Dual Display
- High and Low Measurements Range in a unit mW/cm² or µW/cm²
- Socket for Tripod Mounting
- Automatic Measuring
- Low Battery Indicator
- Magnetic Mount
- 20 Point Memory
- Over Range Indication
- Zero Adjust
- Auto Record

Includes: • UV Sensor probe
- User's manual
- 1 "9V" battery
- Hard carrying case

♦ Spectrum range: 220 to 275nm UVC
♦ Calibration point: 254nm
♦ Illumination range:
  Low: 1 µW/cm² to 1999 µW/cm²
  High: 0.01 mW/cm² to 40.00 mW/cm²
♦ Accuracy at 73.5°±9°F (23°±5°C): ±4% ±1 digit
♦ Sample time: 0.3 seconds approximately
♦ Memory: 20 points plus 1 for interval time
♦ Operation temperature: 32° to 122°F (0° to 50°C); 10 to 90%RH
♦ Power source: 1 "9V" battery (included)
♦ Dimensions: 5.51"(L) x 1.93"(W) x 1.14"(D) (140 x 49 x 29mm)
♦ Weight: 3.2oz (90g) approximately

UPC	NO.	LIST PRICE
01290 1	**UV512C**	$599.95

UV513AB

DIGITAL UVAB METER

This instrument is designed to measure ultraviolet light in the range from 280 to 400 nanometers (UVAB). The illumination range of the meter allows users to conduct the most precise quantitative measurements of ultraviolet radiation for radiometry and laboratory requirements, UV-curing in off-set printing, lamp UV intensity & aging, industrial process monitoring, semiconductor fabrication, sunlight UV intensity to prevent skin damage, sterilization and environmental monitoring.

- Backlit LCD with 4 Digit Dual Display
- High and Low Measurements Range in a unit mW/cm² or µW/cm²
- Socket for Tripod Mounting
- Automatic Measuring
- Low Battery Indicator
- Magnetic Mount
- 20 Point Memory
- Over Range Indication
- Zero Adjust
- Auto Record

Includes: • UV Sensor probe
- User's manual
- 1 "9V" battery
- Hard carrying case

♦ Spectrum range: 280 to 400nm UVAB
♦ Calibration point: 365nm
♦ Illumination range:
  Low: 1 µW/cm² to 1999 µW/cm²
  High: 0.01 mW/cm² to 40.00 mW/cm²
♦ Accuracy at 73.5°±9°F (23°±5°C): ±4%±1 digit
♦ Sample time: 0.3 seconds approximately
♦ Memory: 20 points plus 1 for interval time
♦ Operation temperature: 32° to 122°F (0° to 50°C); 10 to 90%RH
♦ Power source: 1 "9V" battery (included)
♦ Dimensions: 5.51"(L) x 1.93"(W) x 1.14"(D) (140 x 49 x 29mm)
♦ Weight: 3.2oz (90g) approximately

UPC	NO.	LIST PRICE
01279 6	**UV513AB**	$169.95

FEATURES   **SPECIFICATIONS**

3-IN-1 LED STUD/VOLTAGE/METAL DETECTOR

Ideal for Locating Studs, Objects/Wires Carrying Voltage, Hidden Metal.

- Stud, Voltage and Metal Detection combined in one unit
- 4-level low power consuming LED's indicate precise stud detection
- Metal/Voltage Selector Switch provides accuracy in detecting hidden metal or wiring
- Stud Detector can be operated with Metal or Voltage Detector simultaneously
- Easy to distinguish between battens/studs, metal pipes/tubes or objects carrying voltage
- No probe necessary

♦ Power source: 1 "9V" battery (not included)
♦ Dimensions: 6.1"(L) x 2.6"(W) x 1.3"(D)
    (155 x 65 x 32mm)
♦ Weight: 6.3oz (178g)

UPC	NO.	LIST PRICE
01276 5	**MSV250**	$24.99

MSV250

DIGITAL 3-IN-1 LCD STUD/VOLTAGE/METAL DETECTOR

Ideal for Locating Studs, Objects/Wires Carrying Voltage, Hidden Metal.

- Selectable Metal, Voltage and Stud detections or Auto Mode to perform 3 functions simultaneously
- Micro-Processor Control Circuits provide precise and accurate detections
- Results shown on LCD with buzzer
- Multi-Scan-Level to pinpoint exact position
- Battery status indicated on LCD
- Auto Power OFF
- Low power consumption
- Ideal for the D. I.Y. Homeowner, Handyman, Hobbyist and Professional

♦ Power source: 1 "9V" battery (not included)
♦ Dimensions: 6.1"(L) x 2.6"(W) x 1.3"(D)
    (155 x 65 x 32mm)
♦ Weight: 6.5oz (185g)

UPC	NO.	LIST PRICE
01275 8	**MSV350D**	$34.99

MSV350D

HARDNESS TESTER ASTM RATED - PEN-STYLE (SPECIAL ORDER)

Check hardness on most metals. True hand-held compact model.

- Quick and reliable
- Wide measuring range: direct display of converted hardness values in Rockwell HRB, HRC, Vickers HV, Brinell HB and Shore HS
- For most metals
- Impact device provides testing at any angle, even upside down
- 1250 readings memory with data output USB
- Min/Max/Avg
- High accuracy ±0.5%

♦ Hardness parameter HL, HRC, HRB, HV, HB, HS
♦ Battery life: 16 hours continuous
♦ Auto Power Off: 2 Minutes non use
♦ Display functions: Hardness scale, hardness value, average indicator and average value, impact direction, type of impact device connected, memory reference
♦ Overall dimensions:
  6.2"(L) x 1.6"(W) x 1"(D) (158 x 41 x 26mm)
♦ Weight: 4.2oz (120g)
♦ Conforming to ASTM A 956

EMHT40

Includes: • Main Unit
 • Impact Device
 • Cleaning Brush
 • Software & Cable
 • Certificate • Manual
 • Carrying Case

UPC	NO.	LIST PRICE
01304 5	**EMHT40**	$4,999.00

HANDY HEAT INDEX CHECKER, 75MM BLACK BALL

Ideal for industrial uses including HVAC, and outdoor sports medicine applications.

- An industry breakthrough for outdoor sports designs to monitor heat conditions
- Four measurement parameters:
  • WBGT (Wet Bulb Globe Temperature)
  • TG (Globe Temperature)
  • TA (Air Temperature)
  • % (Relative Humidity)

♦ Black ball size: Dia. 75mm, Height 75mm
♦ Temp. (TG) range: 32° to 122°F (0° to 50°C)
♦ Temp. (TG) accuracy: ±2°F (±1°C)
♦ WBGT Temp. range: 32° to 122°F (0° to 50°C)
♦ WBGT Temp. accuracy: ±2°F (15.0° to 35.0°F)
♦ RH% range: 0 to 100% RH
♦ RH accuracy: ±3 %RH (0-90%RH), ±5% RH for other range
♦ Wet Bulb (WB) range: 70° to 115°F (21° to 45°C)
♦ Wet Bulb (WB) accuracy: ±2°F
♦ Dew point range: 32° to 140°F (0° to 60°C)
♦ Dew point accuracy: ±3%
♦ Dimensions: 11"(L) x 3"(W) x 3"(D)
    (278 x 75 x 75mm)
♦ Weight: 5.3oz (150g)

UPC	NO.	LIST PRICE
01308 3	**WBGT8778**	$189.95

WBGT8778

GENERAL®