

Cat14 New Products Supplement – Instruments



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RUGGED VGA RECORDING VIDEO INSPECTION SYSTEM WITH 7-INCH LCD – DCS2000

General's best super high-performance video inspection system. Ideal for professional close-up examinations of hard-to-see and hard-to-reach areas.

FEATURES:

- 7 in. (178mm) diagonal LCD with HD (800 x 480 pixel) resolution
- 1m (39 in.) long, 5.5mm (0.22 in.) diameter flexible-obedient probe with 640 x 480 pixel (VGA) resolution camera
- Camera lighting by six LEDs—four facing forward and two at an angle—provides glare-free viewing in any environment
- Light boost, anti-reflection and 90° frame rotation buttons on probe handle maximize visibility of any inspection target
- Probe and stainless steel camera head are IP67 water, oil and dust-proof. Console is IP57 water, oil and dust-proof, and drop-proof from height of 1m (39 in.).
- Records VGA resolution video clips (with voice annotation) and still images using familiar menu-driven user interface. Saved video and photo files incorporate real-time brightness and zoom adjustments made prior to recording or "on the fly" to optimize target clarity and detail.
- Easy-to-navigate album-style (3 x 3 grid) display of all stored media files
- Different areas of interest on saved photos can be selected for extreme close-up viewing
- Field of view can be enlarged up to 5X, mirrored horizontally, or rotated 90°, 180° or 270°.
 Features can be applied alone or together to make targets easier to inspect and serial numbers easier to read.
- 4GB SD memory card
- Analog video out/headphone jack
- USB cable for uploading media on SD card to PC without ejecting card
- Includes 110° mirrored probe viewing tip
- Console is compatible with six other optional VGA resolution probes from General (see table below)
- Adjustable Auto Power Off triggering time
- Choice of 27 menu languages
- · Custom airtight hard plastic carrying case
- Hand strap and tripod mount

SPECIFICATIONS:

CONSOLE

- Display Size, Type: 7 in. (178mm) diagonal TFT color LCD
- Display Resolution: 800 x 480 pixels
- ♦ Ingress Protection: To water, oil & dust per IP55 standard
- Impact Resistance: Drop from height of 1m (39 in.)
- Recording Resolution: 640 x 480 pixels (VGA)
- Video Zoom Options: 1.5X 2X, 5X
- ♦ Frame Rotation Options: 90°, 180°, 270°
- Interfaces: USB 2.0 and A/V jacks
- Analog Video Out Formats: NTSC and PAL
 Recording Medium: Standard-size SD card of up to 32GB capacity (4GB card included)
- Capacity of Included 4GB SD Card: Three hours of VGA resolution video consuming an average of 26 Mbytes/minute

- Operating Temperature: 14° to 140°F (-10° to 60°C)
- Dimensions of Console:
 9.45 x 6.06 x 1.85 in.
 (240 x 154 x 47mm)
- Weight of Console:
 2.6 lb. (1.18kg)
- Power Source: Rechargeable Lithium-polymer battery
- Battery Life (typical):
 6 hours operation

PROBE/CAMERA HEAD

- Probe Length, Type, Diameter: 1m (39 in.), flexible-obedient, 5.5mm (0.22 in.)
- Diameter of Camera Head with Thread Protector Installed: 6mm (0.23 in.)
- Probe Handle Controls: Light boost, anti-reflection, 90° image rotation
- Probe/Camera Head Ingress Protection: To water, oil & dust per IP67 standard
- ◆ Camera Resolution: 640 x 480 pixels (VGA)
- ♦ Camera Depth of Field: 0.25 to 12 in. (6.4 to 300mm)
- Camera Field of View: 60°
- Camera Lighting: Six LEDs—four forwardfacing, two at an angle

INCLUDES:

- Console
- VGA Resolution Probe
- 110° Mirrored Viewing Tip
- 4GB SD Card
- USB Cable
- AC Adaptor / Battery Charger
- Airtight Hard Plastic Carrying Case
- Hand Strap
- User's Manual
- 1-Year Limited Warranty
- UPC NO.
- 01668 8 **DCS2000** 01685 5 **PSM16** (optional)



DCS2000



The anti-reflection function of the DCS2000's VGA resolution probe

Compatible P	Probes and	Accessories
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Model No. (SKU)	Description	Camera Head Diameter	Probe Length	Depth of Field
P16HPART	VGA Resolution		1m (3.28 ft.)	
P16HP2ART	Articulating Probe	6.0mm (0.23 in.)	2m (6.6 ft.)	
P16HP3ART	7 a dould drig 1 1000		3m (9.8 ft.)	
P16181HP (included with DCS2000)	VGA Resolution Probe	5.5mm (0.22 in.)	1m (3.28 ft.)	0.25 to 12 in. (6.4 to 300mm)
P16182HP		· · · · · ·	2m (6.6 ft.)	
P16183HP	1		3m (9.8 ft.)	
P16PIP	Pipe & Duct Inspection Probe & Reel Set	28mm (1.1 in.)	22m (72 ft.)	0.4 in. (10mm) to infinity
PSM16	Split Mirror for VGA Resolution Articulating Probes			
SDRD1	USB SD Card Reader			

CE FC RoHS





WIRELESS RECORDING VIDEO BORESCOPE SYSTEM WITH **VGA RESOLUTION ARTICULATING PROBE – DCS18HPART**

Ideal for aircraft inspection, machinery and production line inspection, and general maintenance/repair/operations (MRO) tasks.

FEATURES:

- · Combines the console of a DCS1800 Wireless Recording Video Borescope System with a 1m (3.3 ft.) long P18HPART Wireless VGA Resolution Articulating Probe. The P18HPART probe is also available separately as a plug-and-play upgrade of the QVGA resolution probe supplied with DCS1800 and DCS1800ART systems.
- P18HPART—with a diameter of 6mm (0.23 in.)-is IP67 waterproof, with an articulation range of $\pm 155^{\circ}$ and a VGA resolution (640 x 480 pixel) camera lit by five adjustable-brightness white LEDs. Three buttons on the probe's controller allow you to brighten, rotate and remove reflections from video and images to improve their clarity and readability.
- Detaching probe to "go wireless" from up to 10m (33 ft.) away maximizes system flexibility by enabling two-handed inspections (see photo at upper left)
- · Ability to change the probe's viewing axis in situ by up to 155° in two directions-even in close quarters-makes it possible to see around corners or even "behind" the probe
- 3.5 in. diagonal color LCD on console for viewing probe video instantly and saved video clips and pictures later
- · Familiar menu-driven user interface for viewing videos and photos on console's LCD (or TV) and saving media files to standard SD memory card (4GB card included)
- 14 available menu languages

SPECIFICATIONS:

- DCS1800 CONSOLE
- Display Type, Size: Color TFT LCD, 3.5 in. (89mm) diagonal
- Display and Video Recording Resolution: 320 by 240 pixels (QVGA)
- Photo Recording Resolution: 640 x 480 pixels (VGA)
- Analog Video Out Formats: NTSC, PAL
- ♦ Wireless Frequency/Range: 2.4 GHz / 33 ft. (10m)
- Recording Medium: Standard-size SD card
- Operating Temperature: 32° to 140°F (0° to 60°C)
- Dimensions: 8.5 x 4.7x 1.4 in. (215 x 120 x 36mm)
- ◆ Weight: 13.4 oz. (380g)
- Power Source: Rechargeable 3.7V Li-ion battery

P18HPART PROBE

- Size, Type: 1m (3.28 ft.) long x 6mm (0.23 in.) diameter, soft metal
- Water/Oil/Dust Resistance: Per IP67 standard
- Depth of Field/Field of View: 0.25 to 12 in. (6.4 to 300mm)/ 60°
- Camera Lighting: 3 forward-facing LEDs + 2 side-facing LEDs
- Articulation Angle: ±155°
- ♦ Operating Temperature: -4° to 140°F (-20° to 60°C)
- Dimensions of Probe Controller:
- 5.5 x 1.4 x 1.3 in. (139 x 35 x 32mm) Weight of Controller 7.8 oz. (220g)
- Power Source: Rechargeable 3.7V Li-ion battery

INCLUDES:

- DCS1800 Console with 3.5 in. Color LCD
- P18HPART VGA Resolution Wireless Articulating Probe
- 110° Mirrored Viewing Tip
- 4GB SD Memory Card
- AC Adapter / Battery Charger
- A/V Cable
- Custom Hard Plastic Carrying Case
- User's Manual
- 1-Year Limited Warrantv

UPC	NO.
01625 1	DCS18HPART
01713 5	P18HPART





Before pressing anti-reflection button

After pressing anti-reflection button

The probe's anti-glare function in action

DCS18HPART

STATE O



WIRELESS RECORDING VIDEO INSPECTION SYSTEM - DCS500

Ideal for viewing inaccessible areas of buildings, vehicles and equipment. Combines a slim, high-quality 9mm diameter camera-tipped probe with a wireless console featuring a 5 in. color LCD.

FEATURES:

- · Monitor with 5 in. (127mm) diagonal color LCD can be detached from pistol grip and probe to receive video wirelessly
- Grip and monitor are IP54 splash-proof
- 1m (39 in.) long x 9mm (0.35 in.) diameter flexible-obedient camera-tipped probe is IP67 oil- and waterproof
- · Squeezing trigger on pistol grip manually records video clips and still photos onto included 2GB MicroSD card or in integral 128MByte flash memory.
- · Console has 1 to 4X zoom function, adjustable Auto Power Off trigger, magnets on back for attaching to metal surfaces, and built-in microphone and speaker for recording and playing back voice-annotated video clips
- ScopeView software and USB cable for organizing and viewing live and recorded photos and videos on any Windows PC
- · Streams video over Internet through optional RCV100 USB wireless PC dongle
- · Monitor and grip powered by separate rechargeable Li-ion batteries
- TV Out jack and A/V cable for viewing live video on TV monitor
- · Four probe tip accessories (magnetic pickup, pickup hook. 45° mirror, thread protector ring)
- Custom hard plastic carrying case
- · Choice of five menu languages

SPECIFICATIONS:

CAMERA-TIPPED PROBE

- Probe Length, Diameter, Type: 1m (3.3 ft.), 9mm (0.35 in.), flexible-obedient
- Water/Oil/Dust Ingress Protection Level: IP67
- ◆ Light Source: Four adjustable-brightness LEDs
- ♦ Camera Resolution: 640 x 480 pixels
- Camera Depth of Field / Field of View: 1 in. to 10 ft. (25mm to 3m) / 60°
- Transmission Range: 10m (33 ft.) w/no obstacles
- Transmission Frequency: 2.468GHz
- Operating Temperature: 32° to 113°F (0° to 45°C) @5 to 95%RH
- ♦ Grip/Probe Power Source: Rechargeable Li-ion battery (included)

DETACHABLE WIRELESS MONITOR

- Display Size, Type: 5 in. (127mm), TFT LCD
- ◆ Resolution: 800 x 480 pixels
- ◆ Zoom Levels: 1 to 4X in 0.5 steps
- Flash Memory Capacity: 128Mbyte
- TV Output Formats: NTSC, PAL
- ♦ Operating Temperature: 32° to 113°F (0° to 45°C) @5 to 95%RH
- Languages Supported: English, Spanish, French, Portuguese, Mandarin Chinese
- Power Source: Rechargeable Li-ion battery (included)

INCLUDES: Probe

- Pistol Grip w/Brightness Controls and Tripod Mount
- Detachable Monitor w/ LCD, Magnetic Back, Microphone, Speaker and Tripod Mount
- AC Adapter with 2-in-1 Charging Cable
- 2GB MicroSD Card
- USB PC Interface Cable
- ScopeView PC Interface / Media Management Software on Mini-Disc
- Signal Cable for Connecting Grip and Monitor
- A/V Cable
- Four Probe Tip Accessories (45° Mirror, Magnetic Pickup, Pickup Hook, Thread Protector)
- Custom Hard Plastic Carrying Case
- User's Manual
- 1-Year Limited Warranty
 - UPC NO. 01688 6 DCS500

Video over

internet

capability

RCV100 Wireless USB Video Receiver 01446 2 (optional)





DCS500

NEW PRODUCTS - INSTRUMENTS

Watertight Video Inspection Systems

WET/DRY RECORDING AND NON-RECORDING VIDEO INSPECTION SYSTEMS – DCS66X & DCS60X

Ideal for plumbing-related applications. General's unique Wet/Dry systems make it possible to inspect water and sewer lines carrying running water without worrying about dropping or "dunking" grip or monitor. Other "waterproof" inspection systems lack watertight grips and monitors

FEATURES:

- Grips, non-articulating probes and monitors are guaranteed leakproof to depth of 1m; all three components will also resist leaks at depths up to 2m for up to 1 hour
- Standard probes are 1m long with IP67 rating, with VGA resolution (640 x 480 pixel) camera lit by four adjustable-brightness LEDs
- Shaft of articulating probe is IP67 waterproof from tip to top of articulation controller
- Watertight monitors record VGA resolution video clips and save still photos to MicroSD memory card (4GB card included)
- Recorded media can be played back on LCD, or uploaded to a PC via SD card or included USB cable for viewing on larger screen
- Monitors include 3.5 in. (89mm) diagonal color LCD with 320 x 240 pixel resolution
- \bullet Video shown on monitor can be zoomed up to 4X and inverted 180°
- System SKUs ending in "5" include close-focus 5.5mm (0.22 in.) diameter probe. System SKUs ending in "0A" include far-focus 8mm (0.31 in.) diameter probe
- All systems include custom hard plastic carrying case and three probe tip accessories (45° mirror, pickup hook and magnetic pickup)
- Choice of five menu languages
- Powered by four "AA" batteries (not included)



SPECIFICATIONS:

- Probe Type/Diameter/Length: Flexibleobedient/8mm (0.31 in.) or 5.5mm (0.22 in.); 1m (3.3 ft.)
- ♦ Camera Depth of Field: 1.2 in. to 10 ft. (30mm to 3m) or 2.4 in. to 10 ft. (60mm to 3m)
- ♦ Camera Field of View: 54°
- Camera and Recording Resolution: 640 x 480 pixels (VGA)
- Display Type/Size: Color TFT/3.5 in. (89mm)
- Display Resolution: 320 x 240 pixels (QVGA)
- Operating Temperature 14° to 122°F (-10° to 50°C)@15 to 85% RH
- Dimensions of Grip and Console: 4.1 x 7.0 x 5.3 in. (104 x 178 x 135mm)
- ♦ Weight of Grip and Console: 1.1 lb. (500g)
- Dimensions of Carrying Case: 13.0 x 10.5 x 4.5 in. (330 x 267 x 114mm)
- Weight of Carrying Case with Instrument, Probe and All Accessories: 51.2 oz. (1.45kg)
- Power Source: Four "AA" batteries (not included)

INCLUDES:

- Grip, Monitor and Probe
- Three Probe Tip Accessories
- 4GB MicroSD Memory Card (DCS66X systems only
- USB Cable (DCS66X systems only)
- A/V Cable
- Custom Hard Plastic Carrying Case
- User's Manual
- 1-Year Limited Warranty

UPC NO.

- 01746 3 DCS600A (Non-recording, w / 8mm probe)
- 01745 6 DCS605 (Non-recording, w / 5.5mm probe)
- 01747 0 **DCS660A** (Recording, w / 8mm probe)
- 01748 7 **DCS665** (Recording, w / 5.5mm probe) 01743 2 **DCS665-ART** (Recording, w / 5.5mm
- articulating probe)
- 01758 6 **P608-1SR** (1m x 8mm diameter)
- 01752 4 P608-3SR (3m x 8mm diameter)
- 01753 1 P608-5SR (5m x 8mm) diameter)
- 01754 8 P605-1SR (1m x 5.5mm diameter)
- 01755 5 **P605-1ART** (1m x 5.5mm diameter articulating)
- 01744 9 **P610-20PR** (10mm x 20m pipe & duct probe)







DCS665-ART





App-enabled Video Inspection Systems

WIFI BORESCOPES – DCiS2 & DCiS4

Ideal for making high-quality video inspections of hard-to-reach or hard-to-see areas or equipment. By running a free app from the iTunes® App Store or Google Play Store, any iOS (iPhone® or iPad®) or Android™ device can display, capture, store and view video clips and still images observed by the camera-tipped probe.



FEATURES:

- Generates a local WiFi hotspot (without Internet access) for transmitting probe camera video to app-enabled smartphone or tablet
- Long, thin, flexible-obedient waterproof probe captures VGA (640 x 480 pixel) resolution video
- Soft buttons on app capture video clips and still photos of live video stream. Clips and stills are saved within app. Files can be viewed or shared immediately.
- · Camera lighting controls on grip
- Adjustable video resolution and brightness range (DCiS4 only)
- Includes three useful probe tip accessories (45° mirror, pickup hook, magnetic pickup)

SPECIFICATIONS:

- Compatible with: iPad, iPad2, "iPad3", iPad Air, iPad Mini, iPhone3GS, iPhone4, iPhone 4S, iPhone5S, iPhone5C, IPhone 6, iPhone 6 Plus, iPod touch (3rd, 4th, 5th generation) running iOS4.0 or higher; any device running Android 2.3 or higher
- ♦ Video Resolution: 640 x 480 pixels (VGA)
- ♦ WiFi Range: 60 ft. (18m), max (unobstructed)
- Grip Style: Pistol (DCiS4); Wand (DCiS2)
- Probe Type: Fixed (non-interchangeable), flexible-obedient
- Probe Dimensions: 39 in. (1m) long x 9mm (0.35 in.) diameter (DCiS4); 36 in. (914mm) long x 8mm (0.32 in.) diameter (DCiS2)
- ♦ Camera Depth of Field: 1.2 in. to 10 ft. (30mm to 3m) for DCiS4; 0.5 in. to 5 ft. (12.7mm to 1.52m) for DCiS2
- Camera Lighting: Four white LEDs
- ◆ Probe Dust/Water/Oil Resistance: IP67
- Operating Temperature: 32° to 104°F (0° to 40°C)
- Power Source: Four "AA" Alkaline batteries (not included)
- ♦ Battery Life: 3 hours, typical

INCLUDES:

- · Grip and Fixed Probe
- Smartphone Holder
- Three Probe Tip Accessories
- Custom Hard Plastic Carrying Case (DCiS4), Soft Pouch (DCiS2)
- User's Manual
- 1-Year Limited Warranty

UPC	NO.
01665 7	DCiS2
01733 3	DCiS4



DCiS2

CE



IRT850K





IRTC40



IRT855DL

Ideal for measuring high temperatures safely—from a distance. Industrial applications include operation and maintenance of furnaces and heat exchangers.

50:1 ULTRA WIDE-RANGE IR THERMOMETER WITH "K" PORT - IRT850K

FEATURES:

- · Extremely wide measurement range
- Adjustable emissivity
- Dual targeting lasers
- Port for optional "K" type thermocouple • Stores/recalls 24 data sets (measured
- temperature + emissivity setting) • Min/Max/Avg/Dif displays
- · Adjustable Hi and Lo temperature alarms
- Large backlit dual readout LCD
- · White LED flashlight
- Tripod mount

SPECIFICATIONS:

- ♦ IRT Measurement Range: -76° to 2732°F (-60° to 1500°C)
- ♦ IRT Measurement Accuracy: ±1.8°F (1.0°C) from 59° to 95°F (15° to 35°C); ±(2% of reading or 3.6°F (2°C)), whichever is greater, from -27° to 59°F (-33° to 15°C) and from 95° to 2732°F (35° to 1500°C)

- ♦ IRT Emissivity: Adjustable from 0.1 to 1.0
- "K" Port Measurement Range: -83° to 2552°F (-64° to 1400°C)
- "K" Port Measurement Accuracy: \pm (2% of reading +3.6°F/2°C) or \pm 5.4°F (3°C), whichever is greater
- ♦ IRT/"K" Port Measurement Resolution: 0.1° (F or C) below 1000°; 1° at and above 1000°
- ♦ Dimensions: 7.99 x 7.76 x 1.85 in. (203 x 197 x 47mm)
- Weight (including batteries): 13.6 oz. (386g)
- Power Source: Two "AAA" batteries (not included)

INCLUDES:

UPC

01670 1

- Custom Hard Plastic Carrying Case
- User's Manual
- 1-Year Limited Warrantv

NO. IRT850K NISTIRT850K

50:1 ULTRA WIDE-RANGE DATA LOGGING IR THERMOMETER WITH "K" PORT – IRT855DL

Ideal for high-temperature data logging applications.

FEATURES:

- Extremely wide measurement range
- · Adjustable emissivity
- · Laser targeting system outlines analysis area
- "K" thermocouple port and probe
- · Automatically stores last 100 readings (temperature + emissivity setting) for recall
- Min/Max/Avg/Dif displays
- Adjustable Hi and Lo temperature alarms
- Large backlit LCD w/dual 4-digit readouts
- Tripod mount

SPECIFICATIONS:

- ♦ IRT Range: -25° to 3002°F (-32° to 1650°C)
- ♦ IRT Accuracy: ±5.4°F (3°C) from -25° to 59°F $(-32^{\circ} \text{ to } 15^{\circ}\text{C}); \pm (1.5\% \text{ of reading} + 3.6^{\circ}\text{F}/2^{\circ}\text{C})$ from 59° to 122°F (15° to 50°C); ±(1.5% of reading + 1.8°F/1.0°C) from 122° to 950°F (50° to 510°C); ±1.5% of reading above 950°F (510°C)

- ♦ "K" Port Range: -40° to 2498°F
- (-40° to 1370°C)
- ♦ "K" Port Accuracy: ±1.5% of reading ◆ Dimensions: 5.5 x 2.2 x 7.5 in.
- (140 x 56 x 190mm)
- Weight: 17.64 oz. (500g)
- Power Source: "9V" battery (included)

INCLUDES:

- "K" Type Bead Thermocouple with Range of -40° to 500°F (-40° to 260°F)
- PC Interface/Data Logging Software
- USB Cablel
 Battery
- 9VDC Adapter for 110VAC Supply
- Custom Metal Carrying Case
- User's Manual 3-Year Limited Warranty
- UPC NO.

8:1 SCANNING IR THERMOMETER WITH TRICOLOR LCD – IRTC40

Ideal for detecting costly thermal leaks in residential and commercial buildings. Also suitable for HVAC/R system maintenance and electrical troubleshooting.

FEATURES:

- In scanning mode, LCD backlight color (red, green or blue) and beeper speed (fast, silent or slow) indicate-with no need to check readout-whether target is above, within or below reference temperature ± setpoint bandwidth.
- Choice of three setpoint bandwidths: 1°, 5° and 10°F (0.5°, 3° and 5.5°C)

SPECIFICATIONS:

- ♦ Measurement Range: -36° to 968°F (-38° to 520°C)
- ♦ Measurement Accuracy: ±2% of reading or ±3.6°F (2°C), whichever is greater

- Display Resolution: 0.1° (F or C)
- Emissivity: Fixed at 0.95
- ◆ Dimensions: 6.30 x 1.57 x 4.65 in. (160 x 40 x 118mm)
- ♦ Weight: 5.47 oz. (155g) (including batteries)
- Power Source: Two "AAA" batteries (included)

INCLUDES:

- Batteries
 Wrist Strap
- User's Manual
- 1-Year Limited Warranty
- UPC NO.
- 017197 IRTC40

^{01682 4} IRT855DL NISTIRT855DL



RUGGED DIGITAL THERMOCOUPLE THERMOMETERS – DT61 & DT62

Ideal for measuring temperature in an industrial, commercial or laboratory environment.

FEATURES:

- Min/Max/Avg memory
- Compatible with "K", "J", "T" and "E" type thermocouples
- Displays difference between thermocouple readings T1-T2 (DT62 only)
- 2.4 in. diagonal LCD with dual temperature readouts + relative time clock readout
- Adjustable relative time clock enables resetting measurement timeline
- Choice of three temperature units: °C, °F and K
- Data hold button
- Manual temperature compensation (offset) for thermocouple(s)
- Adjustable Auto Power Off trigger

SPECIFICATIONS:

Measurement Ranges: -328° to 2501°F (-200° to 1372°C) with "K" type thermocouple(s); -346° to 2192°F (-210° to 1200°C) with "J" type thermocouple(s); -418° to 752°F (-250° to 400°C) with "T" type thermocouple(s); -238° to 1832°F (-150° to 1000°C) with "E" type thermocouple(s)

- Measurement Accuracy (excluding thermocouple error): ±0.5% of reading typical
- ♦ Measurement Resolution: 0.1° (F or C) below 1000°; 1° (F or C) above 1000°
- ♦ Measurement Range of Included Thermocouple(s): -40° to 572°F (-40° to 300°C)
- ♦ Auto Power Off Trigger: Adjustable from 5 minutes to 1 hour; can be disabled
- Operating Temperature: 32° to 122°F (0° to 50°C) @<80% RH
- Dimensions: 7.5 x 3.5 x 1.6 in. (191 x 89 x 41mm)
- ♦ Weight: 14.1 oz. (400g)
- Power Source: "9V" battery (not included)

INCLUDES:

• Thermometer

- "K" Type Bead Thermocouple Probe (DT61)
- Two "K" Type Bead Thermocouple Probes (DT62)
 - User's Manual
 - 3-Year Limited Warranty

UPC	NO.
01690 9	DT61

	NISTDT61
01690 6	DT62
	NISTDT62





Track food production lines



Monitor high-temperature industrial processes



DT62

NEW PRODUCTS — INSTRUMENTS Moisture Meters



MMD8P



MMD3E

PRECISION MULTI-SPECIES WOOD MOISTURE METER – MMD8P

Ideal for measuring the moisture content of wood before painting, wallpapering, sealing, treating or joining.

FEATURES:

- · Incorporates industry-standard moistureresistance curves for 48 wood species
- · Joystick makes species selection fast and easy
- · Also measures ambient temperature and RH
- Measurements can be compensated for ambient temperature, improving precision
- · Super-bright yellow OLED (organic lightemitting diode) dot matrix display
- · 99-record memory with manual or automatic (time-based) recording
- Multiple display options

SPECIFICATIONS:

- Moisture: - Range: 5.3 to 40%WME (Wood Moisture Equivalent)
 - Accuracy / Resolution: ±(3% of reading + 5 digits) / 0.1%

- ♦ Temperature
- Range: 0° to 176°F (-18° to 80°C)
- Accuracy / Resolution: ±1.8°F (1°C) / 0.1°
- ♦ RH: - Range: 20 to 95%RH Accuracy / Resolution: ±5% of reading / 1%
- Temperature Compensation Range / Resolution: 0° to 255°F (-18° to 124°C) / 5°F
- Display Type: Yellow OLED in 128 x 64 dot-matrix format
- Display Size: 1.54 in. (39mm) diagonal
- Pin Length: 0.2 in. (5mm)
- Power Source: "9V" battery (included)

INCLUDES:

- Battery
- Custom Hard Plastic Carrying Case
- User's Manual
- 1-Year Limited Warranty

PIN-TYPE LCD MOISTURE METER – MMD3E

Ideal for use in woodworking, building construction, home inspection, lumber selection, water-damage restoration.

FEATURES:

- 99.9 count backlit LCD w/0.4 in. high digits
- · Uses different moisture-resistance curves for wood and building materials
- · Low, Medium and High moisture tones and on-screen icons
- Data hold + auto power off + low battery indicator
- Replaceable stainless steel pins (#PIND4E)

SPECIFICATIONS:

- ♦ Overall Moisture Range: 5 to 50% for wood, 1.5 to 33% for building materials
- ♦ Accuracy / Resolution: ±2% / 0.1%
- ◆ Dimensions: 6.0 x 2.6 x 0.8 in. (152 x 66 x 20 mm)
- Power Source: "9V" battery (included)

INCLUDES:

- Two 9mm Long Replacement Pins
- 1-Year Limited Warranty

UPC	NO.
01605 3	MMD3E
01499 8	PIND4E Replacement pins



DSMM600

4-IN-1 SOIL CONDITION METER – DSMM600

Ideal for measuring the temperature, pH and moisture content of soil and the intensity of sunlight shining on it.

FEATURES:

- · Measures soil pH and temperature
- Also gauges soil moisture content within five levels and sunlight intensity within nine levels
- Large backlit triple readout LCD
- °F/°C switch

SPECIFICATIONS:

- ♦ pH Range: 3.5 to 9.0
- ♦ pH Accuracy and Resolution: ±0.5 pH units
- ◆ Temperature Measurement Range: 16° to 122°F (-9° to 50°C)
- ◆ Temperature Accuracy / Resolution: ±1.8°F (1°C) / 1° (F or C)
- ♦ Moisture Level Ranges: <5% (DRY+), 5 to 10%</p> (DRY), 10 to 20% (NOR), 20 to 30% (WET), >30% (WET+)
- ♦ Light Level Ranges: From <500 Lux (LOW-) to >120,000 Lux (HGH+)

- ◆ LCD Size: 1.8 in. (46mm) diagonal; main readout has 0.48 in. (12mm) high digits
- ♦ Operating Temperature: 41° to 104°F (5° to 40°C) @ 5 to 95%RH, non-condensing
- ♦ Dimensions of Meter Body: 4.8 x 2.5 x 1.4 in. (122 x 63 x 36mm)
- Dimensions of Probe (Length x Diameter): 7.9 x 0.24 in. (200 x 6mm)
- Weight (without battery): 2.9 oz. (81g)
- Power Source: "9V" Alkaline battery (not included)

INCLUDES:

- · User's Manual
- 1-Year Limited Warranty NO.
- UPC
- 01680 0 DSMM600

- Protective Cap
 Battery
 User's Manual

UPC	NO.
01605 3	MMD3E
01499 8	PIND4E Replacement pins



Data Logging Temp/RH/Moisture Meter

14-IN-1 DATA LOGGING THERMO-HYGROMETER WITH INTEGRAL PIN / PINLESS MOISTURE METER – RHMG700DL

Ideal for water damage remediators and facilities maintenance professionals.

FEATURES:

• Measures:

- 1. Ambient temperature
- 2. Relative humidity (RH)
- 3. Absolute humidity (in mg/L or g/m³)
- GPP (mixing ratio—in grains per pound or g/kg)
- 5. relative moisture level using pinless sensor
- Absolute moisture level using included pin-type probe
- 7. Dew point temperature
- 8. Wet bulb temperature
- 9. Surface temperature
- 10. Condensation temperature
- 11. Atmospheric pressure
- 12. Vapor pressure
- Stores/recalls 20 pairs of readings
- Logs up to 8000 data points internally, for later download and display as Excel-formatted graph or table on Windows PC using included software and USB cable
- Settable high and low alarms for RH and moisture levels
- Backlit LCD with 3-digit primary readout + 4-digit secondary readout
- Min/Max, Data Hold, and 30-minute Auto Power Off functions

SPECIFICATIONS:

- Ambient Temperature Range/Accuracy: -20° to 167°F (-29° to 75°C) / ±3.6°F (2°C)
- RH Measurement Range: 0 to 100%
 RH Measurement Accuracy: ± 2.5% from
- A Measurement Accuracy: ± 2.5% from 11 to 90%; ± 3% below 11% and above 90%
- Absolute Humidity Range: 0.5 to 240mg/m³ (mg/L)
- ♦ GPP Range: 0 to 999 GPP (0 to 160g/kg)
- ♦ Relative/Absolute Moisture Level Range: 0 to 99.9%
- Pinless Moisture Measurement Depth: 0.75 in. (19mm)
- ♦ Dew Point Range: -76° to 140°F (-60° to 60°C)
- ♦ Atmospheric Pressure Range: 30 to 120 kPA
- ♦ Vapor Pressure Range: 0 to 20.0 kPA

- ♦ Sampling Rate: 2X/sec
- Operating Temperature: 32° to 110°F (0° to 43°C)
- ◆ Dimensions: 7.3 x 2.8 x 1.4 in. (185 × 72 × 36mm)
- ♦ Weight: 6.2 oz. (175g), without battery
- Power Source: "9V" battery (included)

INCLUDES:

- Meter
- PC Data Logging Software and Driver on MiniDisc
- USB Cable
- "K" Type Thermocouple Probe
- Pin-type Moisture Level Probe
- Sensor Protection Cap
- Soft Pouch
- Battery
- User's Manual
- 1-Year Limited Warranty
- UPC NO. 01620 6 RHMG700DL

NISTRHMG700DL





Locate moisture/water damage



Inductive sensor on back measures moisture levels without marring finished surfaces





Check ambient temperature and humidity during restoration drying

Check wood for dampness or rot

NEW PRODUCTS - INSTRUMENTS HVAC / R Psychrometers



DAF3009



MINI ANEMOMETER-PSYCHROMETER WITH CFM / CMM AND ENTHALPY – DAF3009

Ideal for measuring all parameters needed to install, test and fine-tune the performance of an HVAC / R system.

FEATURES:

- Measures:
 1. Airflow volume in cubic feet / min (CFM) or cubic meters / min (CMM)
 - 2. Air speed
 - 3. Enthalpy: the heat of enthalpy of vaporization of air in an HVAC/R system duct
 - 4. Ambient temperature
- 5. Dew Point and Wet Bulb temperatures
- 6. Wind Chill Index (WCI)
- 7. Relative humidity (RH)
- Tracks Min, Max, Avg session values for air speed and airflow volume

SPECIFICATIONS:

- ♦ Air Speed Range: 80 to 5910 ft./min (0.4 to 30 m/s)
- ♦ Air Speed Accuracy: ±(3% of full-scale value + 40 ft. / min (0.2 m/s))
- ♦ Air Speed Resolution: 1 ft. / min (0.1 m/s)
- Temperature Range: 32° to 122°F (0° to 50°C)
- ◆ Temperature Accuracy: ±1.8°F (1°C) from 68° to 104°F (20° to 40°C); ±3.6°F (2°C) elsewhere in range
- ◆ Temperature Resolution: 0.1°
- Airflow Volume Range: 0 to 591,000 CFM (0 to 16,740 CMM)

- ◆ Relative Humidity (RH) Range: 0 to 100%
- ♦ RH Accuracy: ±3% from 20 to 80%RH; ±5% elsewhere
- ◆ Dew Point Range: -67° to 122°F (-55° to 50°C)
- ♦ Wet Bulb Range: -31° to 122°F (-35° to 50°C)
- ♦ Enthalpy Range: -8 to 318 Btu/lb. (-19 to 740kJ/kg)
- Display Type, Size: Backlit LCD, 1.34 x 0.94 in. (34 x 24mm)
- ◆ Operating Temperature: 32° to 122°F (0° to 50°C) @ <85%RH
- Dimensions: 5.83 x 2.08 x 0.87 in. (148 x 53 x 22mm)
- ♦ Weight (without battery): 2.86 oz. (81g)
- Power Source: "CR2032" battery (pre-installed)

INCLUDES:

- Battery
- User's Manual
- 1-Year Limited Warranty

UPC NO. 01696 1 DAF3009

6-IN-1 PSYCHROMETER WITH ENTHALPY – EP8711P

Enables HVAC/R technicians to measure six heat-related parameters with a single instrument. The EP8711P can make the in-duct measurements of an evaporator unit's output needed to fine-tune the system for optimum efficiency. By calculating the enthalpy of the system, the EP8711P allows a technician to compare a system's efficiency before and after charging with a refrigerant.

FEATURES:

- Measures: 1) ambient temperature, 2) relative humidity (RH), 3) dew point, 4) wet bulb temperature, 5) mixing ratio in grains per pound (GPP) or g/kg, and 6) enthalpy in Btu/lb. or kJ/kg
- 6-in. long sensor with graduated insertion depth markings can be swiveled inside vent or grille
- Large 4-digit LCD
- °C/°F switch
- Auto Power Off
- Low battery indication



Measuring a system's enthalpy of vaporization

SPECIFICATIONS:

- Temperature Range: -4° to 158°F (-20° to 70°C)
- Temperature Accuracy: ±0.7°F (±0.3°C)
- Temperature Resolution: 0.1°
- RH Range: 0 to 100%
 - RH Accuracy: ±2% from 10% to 90% RH
 - RH Resolution: 0.1%
 - Dew Point Range: -76° to 158°F (-60° to 70°C)
 - Wet Bulb Range: -49° to 158°F (-45° to 70°C)
 - Mixing Ratio Range: 0 to 999 GPP (0 to 280g/kg)
 - Enthalpy Range: -8 to 318 Btu/lb. (-20kJ/kg)
 - Dimensions: 8.23 x 1.85 x 1.85 in. (209 x 47 x 47mm)
 - Power Source: Three "AAA" batteries (included)

INCLUDES:

- Sensor Protection Cap
- Batteries
- User's Manual
- 1-Year Limited Warranty
- UPC NO. 01677 0 EP8711P

EP8711P



NEW PRODUCTS — INSTRUMENTS **Gas Detectors**

FORMALDEHYDE METER - FD08

Ideal for measuring levels of gaseous formaldehyde (HCHO) as part of a workplace indoor air quality (IAQ) maintenance program, or to spot-check a residential environment.

FEATURES:

- · Electrochemical sensor measures real-time formaldehyde gas concentration with accuracy and resolution that meet U.S. National Institute for Occupational Safety and Health's (NIOSH's) acceptance criterion
- · Also tracks, calculates and displays three cumulative formaldehyde gas metrics: 8-hour TWA (time-weighted average), 1-hour average, and 15-minute STEL (short-term exposure limit)
- One-button calibration to 0 ppm in fresh air
- User-adjustable high concentration audible alarm threshold
- · Also measures relative humidity (RH) and temperature in °F or °C
- · Manually offsettable long-term drift of temperature and RH accuracy
- Min/Max memory and data hold
- Large backlit dual-readout LCD
- Low battery indication
- Tripod mount
- · CE and RoHS approved

SPECIFICATIONS:

- ◆ Formaldehyde Range / Resolution: 0 to 5 ppm / 0.01 ppm
- Formaldehyde Accuracy: ±(5% + 0.03 ppm)*
- ◆ Formaldehyde Sensor Type/Warmup Time: Electrochemical / 1 to 15 minutes, typical

- ♦ Temperature Range: 0° to 122°F (0° to 50°C)
- ◆ Temperature Accuracy/Resolution: ±1.8°F (1°C) / 0.1°
- ♦ RH Range: 10 to 90%RH
- ♦ RH Accuracy / Resolution: ±5% of reading
- Display Type / Size: Dual readout LCD / 2 in. (51mm) diagonal
- ♦ Auto Power Off Trigger: 15 minutes of frontpanel inactivity (can be disabled)
- ♦ Operating Temperature: 32° to 122°F (0° to 50°C) @ 0 to 95%RH, non-condensing
- ◆ Dimensions: 8.3 x 2.4 x 1.0 in. (210 x 60 x 25mm)
- Weight: 7.2 oz. (204g), including batteries
- Power Source: Four "AAA" batteries (not included) or optional 110VAC adapter (General P/N AC2)

INCLUDES:

- Soft Pouch
- User's Manual
- 2-Year Limited Warranty

UPC	NO.
01714 2	FD08

*Meets U.S. National Institute for Occupational Safety and Health's (NIOSH's) acceptance criterion within ±25% of true value at 95% confidence level

DIGITAL DUAL MODE REFRIGERANT LEAK DETECTOR - RLD440

Uses UV LEDs to spot leaks of fluorescent dye injected into an HVAC/R system. A proprietary semiconductor sensor then gauges and displays the size of the leak.

FEATURES:

- Proprietary sensor with lifetime of >300 hours of operation (ten years' normal use)
- Detects all commercially available HFC, HFO, HC, HCFC, and CFC refrigerants
- Only refrigerant leak detector on the market that complies with all five pertinent testing standards: SAE J2791, J2913 and J1627, the new European standard EN14624:2012, and ASHRAE's Halocarbon Refrigerant Leak Detector Standard 173-2012
- Quadruple-redundant leak indicators: UV dye fluorescence, loud fast beep, bright flashing LED and unique digital leak size reading
- True mechanical pump draws in samples, increasing sensitivity
- Sensitivity of 0.05 oz./year (1.4g/year) to R-134a
- Automatic calibration and reset to ambient levels
- Three sensitivity levels
- Fast warmup
- · Padded hard plastic case
- · Garage-durable construction
- Leak test vial
- Made in the U.S.A.
- 2-year warranty includes sensor

SPECIFICATIONS:

- ♦ Refrigerants Detected: R-134a, R-410a, R-404a, R-407c, R-507, CFC-12 (R-12 or Freon), R-22, R-290, R-441A, R-600a, R-1234yf
- Sensitivities: 0.05 oz./yr (1.4 g/yr) to R-134a; 0.025 oz./yr (0.7g/yr) to R-22
- Sensor Type: Proprietary solid electrolyte semiconductor
- Warmup Time: 17 to 20 seconds
- Display Type, Size: 7-segment red LED, 0.6 in. (15mm) high
- ♦ Dimensions of Instrument: 6.8 x 2.6 x 2.2 in. (173 x 66 x 56mm) w/17 in. (432mm) probe
- ♦ Weight of Instrument: 1.5 lb. (680g)
- Power Source: Four "AA" batteries (included)
- Battery Life: 5 hours continuous operation (typical)

INCLUDES:

- Leak Test Vial
- Five Spare Sensor Filters
- Hard Plastic Carrying Case
- Batteries
- User's Manual
- 2-Year Limited Warranty
- UPC NO. RLD440 016756





CE

RoHS

FD08

A Guide to Formaldehyde Exposure Levels			
0.03 ppm	Average outdoor level		
0.10 ppm	Upper short-term exposure limit (STEL) for residences recommended by ASHRAE, ANSI, EPA and NIOSH		
0.40 ppm	Recommended upper STEL for manufactured homes		
0.50 ppm	OSHA's workplace limit		
0.75 ppm	OSHA's 15-minute time-weighted average (TWA) limit		
0.80 ppm	Level at which most people first detect odor		
2.00 ppm	OSHA's STEL limit		

01568 1 AC2 (optional)





WA700





Ideal for detecting leaks from water heaters, washing machines, plumbing and HVAC/R systems.

FEATURES:

- 120-foot range typically enables placement of sensor-transmitter in basement and receiver in upstairs bedroom
- · Sounds loud alarm at receiver and "chirp" at sensor-transmitter when water is detected
- · Receiver can sound alarms from up to four sensor-transmitters deployed in different zones.
- Standard package includes one receiver with AC adaptor and one sensor-transmitter with "9V" battery. Optional package of one additional sensor-transmitter and battery (WA700SEN) is available
- Sensor with suction cup is at end of 23-in. long cord, extending placement options to baseboards and A/C pans
- Transmitter unit includes LED, and battery test button on side

SPECIFICATIONS:

- ♦ Wireless Range: 120 ft. (37m), max
- Dimensions: O Sensor: 1.57 x 1.18 x 0.55 in. (40 x 30 x 14mm)
 - O Transmitter: 2.76 x 2.36 x 1.14 in. (70 x 60 x 29mm)
- O Receiver: 3.70 x 3.31 x 1.46 in. (94 x 84 x 37mm)
- Weight of Standard Package: 6.2 oz. (170g)
- Power Sources (included): 9VDC adaptor for
- receiver, "9V" battery for transmitter

INCLUDES:

- Receiver with 110VAC Adaptor
- Sensor-transmitter with Battery
- Installation Hardware
- User's Manual 1-Year Limited Warranty
- UPC NO. 841105 WA700
- 016947 WA700SEN

USB DIGITAL SOUND LEVEL DATA LOGGER - DSM20

Ideal for monitoring environmental and industrial noise or measuring decibel levels during acoustic design, sound system setups and OSHA compliance testing.

FEATURES:

- One button starts/stops data logging without a PC
- · Plug-and-play USB 2.0 interface; no need for cables, cradles or docks
- · Downloads logs in Excel format
- · LCD displays device status and real-time or Min/Max/Avg session sound level
- "A" or "C" frequency weighting
- · Fast or slow time weighting
- · Sophisticated PC software for analyzing and printing captured data logs

SPECIFICATIONS:

- Measurement Range: 30 to 130dB
- Measurement Accuracy / Resolution: ±1.5dB / 0.1dB
- Maximum Storage Capacity: 32,000 data points

- ♦ Operating Temperature: 32° to 122°F (0° to 50°C) @ 10 to 90% RH
- ♦ Dimensions: 7.09 x 1.10 x 1.06 in. (180 x 28 x 27 mm)
- Weight: 2.01 oz. (57g) without battery
- Power Source: "1/2AA" non-rechargeable 3.6VDC Lithium-ion battery (included)

INCLUDES:

- Data Logger
 Battery
- PC Interface/Data Logging Software with Installation/Operating Manual on Mini-disc
- Mounting Stand
 USB Extension Cable
- User's Manual 1-Year Limited Warranty

UPC	NO.
01679 4	DSM20
72015 8	BA10 replacement "1/2AA" battery
	(optional)

USB RH / TEMPERATURE/GPP MINI DATA LOGGER - HT08

Ideal for water damage restoration, process control and environmental monitoring. **FEATURES:**

- · One button starts/stops logging without a PC
- · Plug-and-play USB 2.0 interface; no need for cables, cradles or docks
- Large storage capacity: 16,300 pairs of RH and temperature readings
- Two LEDs indicate device working status
- · Sophisticated PC software for analyzing and printing captured data logs
- · Software also 1) calculates dew point and wet bulb temperatures, as well as absolute humidity and 2) displays data logs as time-based graphs synchronized to your PC's clock

SPECIFICATIONS:

- ◆ Temperature Range: -4° to 158°F (-20° to 70°C)
- Temperature Accuracy: ±1.8°F (1°C) from 14° to 104°F (-10° to 40°C); ±3.6°F (2°C) elsewhere in range

- ◆ Relative Humidity (RH) Range: 0 to 100%
- ♦ RH Accuracy ±3% from 20 to 80%RH
- ◆ Dimensions: 3.74 x 1.11 x 1.22 in. $(95 \times 28 \times 31 \text{ mm})$
- ♦ Weight: 1.41 oz. (40g) without battery
- Power Source: "1/2AA" 3.6V non-rechargeable Lithium-ion battery (included)

INCLUDES:

- Data Logger
- PC Interface/Data Logging Software with Installation/Operating Manual on Mini-disc
- USB Extension Cord Battery
- User's Manual 1-Year Limited Warranty

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	UPC	NO.				
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HT08



3-AXIS USB VIBRATION/ACCELERATION DATA LOGGER – VB10

Ideal for assessing the health and diagnosing performance problems of rotating machinery. Slight changes in the axial accelerations of a motor over time can reveal whether it is running efficiently and even indicate whether it may fail in the future.

FEATURES:

- Uses three components to collect and present vibration data: 1) A mountable, memory stick-sized USB data logger containing three precision accelerometers; 2) A pedestal for mounting the logger on an operating piece of equipment; and 3) A sophisticated Windowscompatible graphics application. Once the logger has been dismounted, plugging it into a PC automatically imports hours of vibration, motion and tilt data to the application.
- One button starts/stops data logging without a PC
- Plug-and-play USB 2.0 interface; no need for cables, cradles or docks
- Mounting pedestal with magnets and three screw holes
- PC interface/analysis software can download recorded data or acquire real-time data or real-time frequency data
- Software is used to set system clock, operating mode (normal, time-triggered or motion measuring), sampling rate and axial high/low alarm thresholds
- Powerful analysis modes, including Fast Fourier Transform frequency conversion and timedomain analysis
- One-click exporting of tabular data to .txt file
 or graph to printer
- Red and green LEDs indicate device status (recording, not recording, battery low, memory full)
- Powered by high-capacity, long-life, non-rechargeable Li-ion battery

SPECIFICATIONS:

- ♦ Acceleration Measurement Range: -16g to 16g
- ♦ Acceleration Accuracy / Resolution: ±0.5g / 0.0039g
- ◆ Frequency Range: 0 to 60Hz
- ♦ Data Logging Capacity: 327,600 data points in 16MByte flash memory
- User-selectable Sampling Time: 50ms to 24hours
- Software Compatibility: Windows XP/Vista/WIN7/WIN8
- Maximum Continuous Logging Time: 60 hours
- ♦ Operating Temperature : 32° to 113°F
- (0° to 45°C) @5 to 95%RH ♦ Dimensions (including pedestal):
- 4.45 x 2.13 x 1.28 in. (113 x 54 x 32.5mm)
- Weight (without battery): 2.6 oz. (73.5g)

INCLUDES:

- USB Data Logger
- Mounting Pedestal with Magnets and Screw Holes
- Windows-Compatible PC Interface / graphics / analysis "Shock" Application on Mini-Disc
- User's Manual 1-Year Limited Warranty

UPC NO. 01717 3 VB10





DATA LOGGING HOT WIRE ANEMOMETER WITH CFM / CMM & 30:1 IR THERMOMETER - CIH30DL

Ideal for measuring speed, volume and temperature of slow-moving air. **FEATURES**:

- Measures air flow volume up to 2.5 million cubic feet/minute (CMM)/72,000 cubic meters per minute (CMM)
- Hot wire sensor detects even the slightest (2.0 ft./min) air movement; also measures ambient temperature
- Five available air speed units: ft./min, m/sec, mph, km/hr, knots
- 30:1 IR thermometer with laser pointer and measurement range of -25° to 999°F (-32° to 537°C)

SPECIFICATIONS:

- ♦ Air Speed Range: 2.0 to 7874 ft./min (20mm/sec to 40m/sec)
- ♦ Air Speed Accuracy: ±3% + 5.9 ft./min (0.03m/sec)
- Airflow Volume Range / Resolution: 0 to 2,542,700 CFM (0 to 72,000 CMM) / 0.01 CFM (0.001 CMM)
- IRT Emissivity: Adjustable from 0.1 to 1.0 in increments of 0.01
- ♦ IRT Range / Resolution: -25° to 999°F (-32° to 537°C) / 0.1°(F or C)

- ♦ IRT Accuracy: ±5.4°F (±3°C) from -25° to -4°F (-32° to -20°C); ±3.6°F (±2°C) from -4° to 212°F (-20° to 100°C); ±2% from 212° to 999°F (100° to 537°C)
- ♦ Hot Wire Sensor Measurement Range / Accuracy / Resolution: 32° to 158°F (0° to 70°C) / ±1.5°F (±0.8°C) / 0.1°
- Memory: Nine readings + Max/Min/Avg
- Extended Length of Telescoping Hot Wire Probe: 70.8 in. (1.8m)
- Dimensions: 7.24 x 2.75 x 1.57 in. (184 x 70 x 40mm)
- ♦ Weight: 12.36 oz. (350g)
- Power Source: 1 "9V" battery (included)

INCLUDES:

- Anemometer
- PC Interface/Data Logging Software on Disc
- USB Cable AC Adapter "9V" Battery
- Custom Hard Plastic Carrying Case
- User's Manual 1-Year Limited Warranty

UPC NO. 01681 7 CIH30DL



NIND Indicates optional NIST calibration is available

NEW PRODUCTS — INSTRUMENTS Outdoor Anemometers



DAF3008





3-PARAMETER MINI ANEMOMETER – DAF3008

Calculates Wind Chill Index from measurements of temperature and wind speed. A potential life-saver for cold-weather sportsmen such as winter campers, mountaineers and skiers.

FEATURES:

- · Measures or calculates
- 1. Ambient Temperature
- 2. Wind Speed
- 3. Wind Chill Index
- · Small and light enough for one-handed operation
- · Calculates and displays Min, Max and Avg wind speed values over periods of up to 5 minutes
- Large backlit LCD
- Data hold button
- 5-minute Auto Power Off
- · Includes battery and wrist strap
- CE and RoHS approved

SPECIFICATIONS:

♦ Wind Speed Range: 80 to 5910 fpm (0.9 to 67 mph, 0.4 to 30 m/s, 24 to 1801 m/m, 1.4 to 108 km/hr, 0.8 to 58.3 knots)

- ♦ Wind Speed Basic Accuracy: ±3% of full-scale value
- Temperature Range: 32° to 122°F (0° to 50°C)
- ♦ Temperature Accuracy: ±2°F (±1.2°C)
- Operating Temperature: 32° to 104°F (0° to 40°C) @ <95%RH
- Dimensions:
- 5.83 x 2.08 x 0.87 in. (148 x 53 x 22mm) ♦ Weight: 2.9 oz. (82.2g)
- Power Source: "CR2032" battery (included)

INCLUDES:

- Wrist Strap
- Battery
- User's Manual
- 1-Year Limited Warranty

NO.

- UPC
- DAF3008 01667 1



9-PARAMETER MINI ANEMOMETER/PSYCHROMETER WITH COMPASS AND MEMORY - DAF3012M

Ideal for tracking multiple outdoor environmental parameters, including Wind Chill Index. A potential life-saver for outdoorsmen and sports coaches.

FEATURES:

- Measures or calculates:
- 1. Ambient temperature
- 2. Wind speed
- 3. Wind direction
- 4. Relative humidity (RH)
- 5. Dew point temperature
- 6. Wet bulb temperature
- 7. Wind Chill Index
- 8. Barometric pressure
- 9. Compass
- Stores / recalls 20 readings
- · Dual LCD readouts
- · Calculates and displays Min. Max and Avg wind speed values over periods of up to 5 minutes
- °C/°F readout for all temperatures
- · Five Imperial/metric unit options for wind speed
- Data hold
- Battery charge indicator
- · Protective cap for vane and sensor
- Tripod mount

SPECIFICATIONS:

- ◆ Temperature Range: -4° to 158°F (-20° to 70°C)
- ◆ Temperature Accuracy: ±1.8°F (1°C) from 14° to 104°F (-10° to 40°C); ±3.6°F (2°C) elsewhere in range
- 80 to 5910 fpm (0.9 to 67 mph, 0.4 to 30 m/s, 24 to 1801 m / min, 1.4 to 108 km/hr, 0.8 to 58.3 knots)

- ♦ RH Range: 0 to 100%
 - ±5% elsewhere
- ◆ Dew Point Range: -67° to 122°F (-55° to 50°C)
- ♦ Wet Bulb Range: -31° to 122°F (-35° to 50°C)
- ◆ Barometric Pressure Range / Accuracy: 30 to 120kPa / ±0.2kPa (typical)

INCLUDES:

- Wrist Strap
 Battery
 User's Manual
- 1-Year Limited Warranty

UPC NO.

01697 8 DAF3012M

- - - Wind Speed Range:
 - ♦ Wind Speed Basic Accuracy:
 - ±3% of full-scale value

 - ♦ RH Accuracy: ±3% from 20 to 80%RH;
 - - Power Source: "CR2032" battery (included)



80 AMP AC/DC CLAMP METER WITH NCV DETECTION - CM380

Ideal for troubleshooting automotive and process control systems.

FEATURES:

- 11 functions, 38 ranges
- Measures AC/DC current, AC/DC voltage, resistance, frequency (through the clamp or test leads), capacitance and duty cycle
- Also measures temperature via included "K" type bead thermocouple probe
- · Also checks for continuity and diode integrity
- 0.1mV and 1mA maximum resolutions · Clamp jaw sized for
- automotive electrical cables
- Auto or manual ranging
- ETL approved for CAT III 600V use
- Backlit 4000-count LCD with 0.5 in. (13mm) high digits
- Built-in non-contact voltage (NCV) detector
- Built-in LED work light

SPECIFICATIONS:

- Range / Accuracy / Max. Resolution
- AC/DC Current: 0 to 80A / ±2.5% / 1mA
- AC/DC Voltage: 0 to 600V / ±1% / 0.1mV
- Resistance: 0 to $40M\Omega / \pm 0.8\% / 0.1\Omega$
- Frequency: 10Hz to 10MHz / ±0.5% typical / 0.001Hz
- Capacitance: 0 to 40mF / ±4% / 0.001nF
- Temperature: -4° to 1832°F (-20° to 1000°C)/ ±3% / 1°

- Clamp Jaw Opening: 0.95 in. (24mm)
- ♦ Operating Temperature: 14° to 122°F (-10° to 50°C)
- Dimensions: 8.19 x 3.07 x 1.38 in. (208×78×35mm)
- Weight (including batteries): 7.6 oz. (215g)
- Power Source: Three "AAA" batteries (included)

INCLUDES:

- Meter
- · Double-insulated Test Leads with Screw-on Alligator Clips
- "K" type Bead Thermocouple Probe and Plug Adaptor

- Soft Pouch
- Batteries
- User's Manual
- 3-Year Limited Warranty

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UPC	NO.
01684 8	CM380
	NISTCM380
01521 6	ACL10 15A Line Splitter (optional)
01639 8	FX3000 3000 Amp Flex Clamp Adaptor
	(optional)





RUGGED SERVICE MULTIMETERS – DMM52FSG & DMM53FSG

Ideal for heavy-duty and general-purpose use. A microamp range is essential for measuring flame rod current.

FEATURES:

- 8 functions, 31 ranges (DMM52FSG); 11 functions, 32 ranges (DMM53FSG)
- Measures AC/DC voltage, AC/DC current, resistance, bipolar transistor forward current gain (hFE)
- Also measures capacitance, frequency, temperature using included "K" type bead thermocouple probe (DMM53FSG only)
- 0 to 20µADC and 0 to 200µADC ranges (DMM52FSG) / 0 to 20µADC range (DMM53FSG) for measuring flame rod current
- Checks continuity and diode integrity
- IP54 water/oil/dust protection
- 6.6 ft. (2m) drop-resistant
- · ETL approved CAT III 600V safety rating
- Jumbo 3-1/2 digit (2000 count) LCD with 0.95 in. (24mm) high digits
- 25-minute Auto Power Off
- · Powered by "9V" battery (not included)
- Low battery indication

SPECIFICATIONS:

- Range / Accuracy / Max. Resolution
- AC/DC Current: 0 to 80A / ±2.5% typical / 1mA - AC/DC Voltage: 0 to 600V / ±1% typical /
- 0 1mV
- Resistance: 0 to $40M\Omega$ / $\pm 0.8\%$ typical / 0.1Ω
- Frequency (DMM53FSG only): 10Hz to 10MHz / ±0.5% typical / 0.001Hz
- Capacitance (DMM53FSG only): 0 to 40mF / ±4% typical / 0.001nF
- Temperature (DMM53FSG only): -4° to 1832°F (-20° to 1000°C) / ±2% / 1°

INCLUDES:

Meter

- "K" type probe with -40° to 500°F range (DMM53FSG only)
- 1000V/10A-rated double-insulated test leads
- · Multi-function plug adaptor for bipolar
- transistors
- User's Manual 1 Year Limited Warranty

UPC	NO.
01703 6	DMM52FSG
	NISTDMM52FSG
01720 3	DMM53FSG
	NISTDMM53FSG





NEW PRODUCTS — INSTRUMENTS Rugged True RMS Multimeters with NCV

. CE



DMM570



RUGGED TRUE RMS MULTIMETERS WITH NCV DETECTION DMM570: w/3-3/4 DIGIT (6,600 COUNT) BACKLIT LCD AND LO-Z MODE DMM550: w/ 3-1/2 DIGIT (4,000 COUNT) BACKLIT LCD

Ideal for electrical contractors, HVAC/R technicians and MRO professionals.

FEATURES:

- 19 functions, 48 ranges (DMM570); 18 functions, 48 ranges (DMM550)
- Measures AC/DC voltage, AC/DC current, resistance, capacitance, frequency, duty cycle
- Also measures temperature from 32° to 1832°F (0° to 1000°C) with included "K" type stem thermocouple
- · Checks continuity and diode integrity
- True RMS measurements
- IP54 water/dust/oil protection
- 6 ft. (1.8m) drop-resistant
- Designed to meet CAT III 1000V, CAT IV 600V safety standard
- Auto or manual ranging
- Non-contact voltage (NCV) detection
- Lo-Z (low-impedance) mode: avoids "ghost" AC voltage readings due to capacitive coupling of voltage from power supply conductors onto adjacent unused conductors (DMM570 only)
- Fast-response analog bar graph at bottom of LCD: 66 segments (DMM570), 40 segments (DMM550)
- Hold, Max, Min, Rel (Zero) display options
- Auto Power Off (can be disabled)
- Magnetic hanging strap (DMM570 only)
- · CE approved
- ETL certified



SPECIFICATIONS:

- DC Voltage Range / Accuracy: 0 to 1000V / ±0.5% typical
- ♦ AC Voltage Range / Accuracy: 0 to 750V (True RMS) / ±1.5% typical
- DC Current Range / Accuracy: 0 to 10A / ±1% typical
- AC Current Range / Accuracy: 0 to 10A / ±1.5% typical
- ♦ Resistance Range / Accuracy: 0 to 66MΩ $(DMM570), 0 \text{ to } 40M\Omega (DMM550) / \pm 0.8\%$
- ◆ Frequency Range / Accuracy: 0 to 66MHz (DMM570), 0 to 40MHz (DMM550) / ±1.5%
- ♦ Capacitance Range / Accuracy: 0 to 66mF (DMM570), 0 to 40mF (DMM550) / ±3%
- ◆ Temperature Range / Accuracy: 32° to 1832°F (0° to 1000°C) / ±1%
- ♦ Duty Cycle Range / Accuracy: 10 to 95% / ±2%
- NCV Detection Range: >110VAC
- Overload Protection Level in Voltage and Current Modes: 1000V
- Overload Protection Level in Resistance, Frequency, Continuity, Diode Integrity and Capacitance Modes; 250VAC/DC_{RMS}
- Input Impedance: $10M\Omega$ in all modes (except $400k\Omega$ in DMM570 Lo-Z mode)
- Auto Power Off Trigger: 15 minutes of front-panel inactivity
- ♦ Operating Temperature: 32° to 104°F (0° to 40°C)
- ♦ Dimensions: 6.9 x 3.3 x 2.1 in. (176 x 84 x 54mm)
- ♦ Weight: 13.4 oz. (380g)
- Power Source: "9V" battery (included)

INCLUDES:

- "K" Type Stem Thermocouple Probe
- Adaptor for Thermocouples with Spade Lugs
- CAT III 1000V/10A Rated Test Leads with Alligator Clips
- Magnetic Meter Hanging Strap (DMM570 only)
- Soft Pouch with Belt Loop
- Battery
- User's Manual
- 3-Year Limited Warranty MO

UPC

UFC	NU.
01683 1	DMM550
	NISTDMM550
01642 8	DMM570
	NISTDMM570
01639 8	FX3000 3000 Amp Flex Clamp Adaptor
	(optional)





DMM550

N



8-FUNCTION DIGITAL MULTIMETER WITH NCV DETECTION - DMM30

Ideal for making basic electrical measurements safely.

FEATURES:

- 8 functions, 21 ranges
- Measures AC/DC voltage, DC current and resistance
- Also checks continuity, diode integrity and battery voltage
- Non-contact voltage (NCV) detection
- ETL certified safe for CAT II 600V use
- Jumbo 3-1/2 digit (2000 count) LCD with 7/8 in. (22mm) high digits
- · Low battery indication

SPECIFICATIONS:

- ♦ AC/DC Voltage Range / Accuracy: 0 to 600V / ±1.0%
- DC Current Range / Accuracy: 0 to 10A / ±0.8% typical

- \blacklozenge Resistance Range / Accuracy: 0 to 2M Ω / ±0.8%
- Max Resolutions: 0.1mV, 1µA, 0.1Ω
- Display: 3-1/2 digit (1999 count) LCD ◆ Dimensions: 7.40 x 3.66 x 1.97 in. (188 x 93 x 50mm)
- ♦ Weight (including battery): 13.4 oz. (380g)
- Power Source: "9V" battery (included)

INCLUDES: Meter

- · Double-insulated Test Leads
- Battery
- · User's Manual
- 3-Year Limited Warranty
 - UPC NO.
 - **DMM30** 01731 9

NEW PRODUCTS — INSTRUMENTS



DMM30

DIGITAL MULTIMETER - DMM20

Ideal for making basic measurements safely.

FEATURES:

- 7 functions, 20 ranges
- Measures AC/DC voltage, DC current, resistance
- Also checks for continuity and diode integrity
- Includes 1.5V & 9V battery test positions
- Large LCD
- · Safety-recessed test lead sockets
- High-impact thermoplastic case
- ETL approved

RANGES / ACCURACIES:

- ◆ AC Voltage Measurement Range / Accuracy: 0 to 600V / ±1.2%
- DC Voltage Measurement Range / Accuracy: 0 to $600V / \pm 1\%$
- DC Current Measurement Range / Accuracy: 0 to 10A / ±2%
- Resistance Measurement Range / Accuracy: 0 to $2M\Omega/\pm 1.2\%$

- Max Resolutions: 0.1mV, 100μV, 0.1Ω
- Display: 3-1/2 digit (1999 count) LCD
- Dimensions: 5.0 x 2.8 x 1.0 in.
- (126 x 70 x 26mm)
- Weight: 4.4 oz. (125g)
- Power Source: "9V" battery (included)

INCLUDES:

- Meter
- Test Leads
- Battery
- Soft Pouch
- User's Manual
- 1-Year Limited Warranty
- UPC NO. 01701 2 DMM20



SMART MULTIMETER – SMT20

Automatically measures voltage or resistance based on input. Ideal for basic troubleshooting.

FEATURES:

- 7 functions, 24 ranges
- Measures AC/DC voltage, resistance, frequency and capacitance
- Also checks circuits for continuity
- Non-contact voltage (NCV) detector
- ETL certified safe for CAT II 600V use
- Auto ranging
- 3-5/6 digit (6000 count) LCD

SPECIFICATIONS:

- ♦ AC Voltage Range / Accuracy: 0 to 600V / ±1%
- ◆ DC Voltage Range / Accuracy: 0 to 600V / +0.8%
- Resistance Range / Accuracy: 0 to 10MΩ / ±2% typical

- Frequency Range / Accuracy: 1Hz to 100kHz /
- ♦ Capacitance Range / Accuracy: 1nF to 100µF / ±5% typical
- ♦ NCV Detection Range: 50 to 600VAC
- ♦ Operating Temperature: 32° to 104°F
- (0° to 40°C) @<75%RH
- Power Source: Two LR44 or equivalent button batteries (included)

INCLUDES:

- Meter
- · Fixed (non-detachable) Test Leads
- User's Manual
- 1-Year Limited Warranty



SMT20

- - ±1%

NEW PRODUCTS - INSTRUMENTS NCV and Wood / Metal Detectors





VS4000

NON-CONTACT VOLTAGE DETECTOR WITH ADJUSTABLE SENSITIVITY - VS4000

Provides a safe (non-contact) way to check whether an electric line or cable or AC outlet is "hot" (energized).

FEATURES:

- Beeper sounds and red LED flashes when voltage is detected
- Wide voltage range
- Adjustable sensitivity takes the guesswork out of identifying the "hot" wire of a bundle
- Safe for CAT IV 1000V use
- ETL approved
- Built-in bright white LED flashlight

Pocket clip SPECIFICATIONS:

- ◆ Detection Range: 5 to 1000VAC @ 50 to 400Hz
- ◆ Detection Distance: 2.5 in. (64mm) max
- Operating Temperature: 32° to 104°F (0° to 40°C) @ <85% RH
- Dimensions: 6.1 x 1.3 x 1.1 in. (154 x 32 x 28mm)

Weight (with batteries): 1.8 oz. (55g)
Power Source: Two "AAA" batteries (included)

INCLUDES:

- Batteries
- User's Manual
- 1-Year Limited Warranty





3-IN-1 STUD / VOLTAGE / METAL DETECTOR - MSV100

1.1

Locates wood studs and joists and metal cables and pipes behind walls or inside furniture. Also detects energized AC outlets and "live" wires behind walls or ceilings. Ideal for building contractors, carpenters, plumbers, HVAC/R specialists, home inspectors, electricians, realtors, home owners and interior decorators.

FEATURES:

- Automatically compensates for wall thickness in all three detection modes
- In AC voltage mode, automatically compensates for distance to live wire
- Center arrow and beeper pinpoint edges
- Visual and audible indications
- · Marking slot on top of unit
- Big, bright backlit LCD

SPECIFICATIONS:

- Maximum Wall Thickness for Wood Detection: 3/4 in. (19mm)
- Maximum Detection Range for Iron or Copper Pipe: 1.5 in. (38mm)
- Maximum Detection Range for AC Voltage: 2 in. (50mm)

- Operating Temperature: 40° to 104°F (5° to 40°C)
- Dimensions: 7.1 x 3.0 x 1.2 in. (180 x 75 x 30mm)
- Weight: 7.3 oz. (207g)
- Power Source: "9V" battery (included)

INCLUDES:

- Battery
- User's Manual
- 1-Year Limited Warranty
- UPC NO. 01710 4 MSV100

MSV100

General Tools & Instruments





NEW PRODUCTS – INSTRUMENTS Value Electrical Kits

HVAC METER KIT - KHV57030

Ideal for HVAC/R professionals who routinely measure surface temperature on contact or from a distance.

KIT INCLUDES:

- DMM570 Rugged True RMS Multimeter with NCV Detection
- & Lo-Z Mode (see p. 18) • IRT730K 30:1 Ultra Wide-Range
- (-58° to 1472°F / -50° to 800°C) IR Thermometer with "K" Port
- Custom padded carrying case

NO.

- Instrument accessories, batteries and user's manuals
- UPC
- 01664 0 **KHV57030**



ELECTRICIAN'S KIT - KEL57060

Ideal for MRO professionals and electricians working residential and commercial jobs.

KIT INCLUDES:

- DMM570 Rugged True RMS Multimeter with NCV Detection & Lo-Z Mode (see p. 18)
- DAMP60 Auto Ranging 600 Amp Clamp Meter
- Custom padded carrying case
- Instrument accessories batteries and
- Instrument accessories, batteries and user's manuals
- UPC NO. 01662 6 KEL57060



HVAC DMM KIT - KHVP57068

Ideal for HVAC/R professionals who routinely measure current.

KIT INCLUDES:

- DMM570 Rugged True RMS Multimeter with NCV Detection & Lo-Z Mode (see p. 18)
- DAMP68 Auto Ranging AC/DC True RMS 400 Amp AC Clamp Meter
- · Custom padded carrying case
- · Instrument accessories, batteries and user's manuals
- UPC NO. 01663 3 KHVP57068



3000 AMP CLAMP METER KIT – CK700-FX

Ideal for MRO professionals and electricians working commercial or light industrial jobs.



INDUSTRIAL TROUBLESHOOTING KIT - KT600

Ideal for contractors, electricians, HVAC/R technicians and MRO specialists who use current, voltage and temperature readings to diagnose equipment problems.



INDUSTRIAL MULTIMETER KIT – KT550

Ideal for electrical contractors and electricians who need to measure high voltages and microamp currents in a variety of environments.



KIT INCLUDES:

(see p. 18)

(see p. 20)

NO.

KT600

UPC

01738 8

- DMM550 Rugged True RMS Multimeter with NCV Detection (see p. 18)
- VS4000 Non-Contact Voltage Detector with Adjustable Sensitivity (see p. 20)
- · Custom padded carrying case
- Instrument accessories, batteries and user's manuals

IR Thermometer with Star Burst Laser Targeting

- UPC NO.
- 01737 1 KT550



NEW PRODUCTS - INSTRUMENTS Value Electrical Kits

ELECTRICAL TEST KIT - KT20

Ideal for professional and DIY electricians.

- **KIT INCLUDES:**
- DAMP60 Auto Ranging 600 Amp Clamp Meter
- DMM30 8-Function Digital Multimeter with NCV Detection (see p. 19)
- VS3000A Audible / Visual Non-Contact Voltage Detector, **ETL Certified**
- GF1302 3-Wire Receptacle Tester with GFCI
- Custom padded carrying pouch
- Instrument accessories, batteries and user's manuals

UPC	NO.
01726 5	KT20

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HVAC/R FIELD ELECTRICAL TEST KIT - KT50

Ideal for HVAC/R technicians who routinely measure current-including very small burner flame rod currents.

KIT INCLUDES:

- DAMP60 Auto Ranging 600 Amp Clamp Meter
- DMM53FSG Rugged Service Multimeter (see p. 17)
- VS3000A Audible / Visual Non-Contact Voltage Detector, ETL Certified
- Custom padded carrying pouch

KT50

• Instrument accessories, batteries and user's manuals

UPC NO. 017326



ELECTRICAL TROUBLESHOOTING KIT – KT5

Ideal for checking outlets and wiring.

KIT INCLUDES:

• Smart Multimeter (see p. 19)

NO.

- VS4000 Non-Contact Voltage Detector with Adjustable Sensitivity (see p. 20)
- GF1302 3-Wire Receptacle Tester with GFCI
- · Instrument batteries and user's manuals
- UPC

017401 KT5





Specialty Tools & Instruments

GENERAL TOOLS & INSTRUMENTS

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