

New Products - 2012



Precision, Specialty and Innovation . . . Since 1922





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President & CEO's Message

90 years young . . .

Over the past 90 years General has been dedicated to precision, specialty and innovation in the development and offering of its products. 2011 was our best year ever both in terms of new product launches and revenue generated. This year is shaping up to be even better as innovation remains the linchpin of General's tradition of excellence.

Despite having hundreds of tools and instruments in our portfolio, we know we must continue our history of product innovation or General will be history—competitively speaking. That also applies to the development of innovative services to simplify your communication with us and to enable your customers to have a fuller appreciation of our top-quality products. I believe that, unlike genius, technological innovation is not "one percent inspiration and ninety-nine percent perspiration," in Edison's famous words. From my perspective as a businessman, profitable innovation today is fifty percent communication—listening to customers explain what they need—and fifty percent dedication—going the extra mile to nail down a new product design so our factory can ship it out so you can build it in.

I and my colleagues at General thank you for your past patronage and we look forward to a closer and more rewarding relationship with you. We also look forward to your feedback—positive or negative—as we strengthen our existing ties and forge new ones. Call me at 212-431-6100 or e-mail me directly at j.ennis@generaltools.com if I can help you or if you have any ideas that would help us serve you better.

Joe Ennis, President and CEO













NEW PRODUCTS Video Inspection Systems & Probes

PE14 *ETL* Certified *CAT III 1000V, CAT IV 600V Electrically Insulated Probe* See pages 17, 18

CE 3

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DCS400-PE The Seeker™400-PE ETL Certified Wireless Recording Video Inspection System with Electrically Insulated Probe See pages 17, 18

> **DCS600** SeaScope[™]600 Waterproof Video Inspection System - Non-Recording See pages 15, 16

DCS660 SeaScope™660 Waterproof Video Inspection System -Recording See pages 15, 16

No series and ser

NEW PRODUCTS Video Inspection Systems, Components & Probes







NEW PRODUCTS Environmental Monitoring & Laser Distance Meters



NEW PRODUCTS Electrical Instruments







"PREDATOR" Series Thermal Imaging Cameras

GTi10 GTi20 GTi30

Available Q3 2012

GTi10: Thermal Imaging GTi20: Thermal/Visual Imaging with Picture-in-picture GTi30: Thermal/Visual Imaging with Picture-in-picture, Streaming Video and Voice Annotation

Ideal for revealing hidden heat-driven processes and problems. Applications include: equipment maintenance, repair and operations (MRO); building energy audits; process/manufacturing plant maintenance; water damage restoration; firefighting; navigation; surveillance.

By converting objects' infrared (IR) radiation to visible color images, thermal imaging cameras make it possible to detect very small temperature differences from a distance. Heat signatures can help diagnose the cause of equipment failures and poor performance due to wear and tear, misalignments and fault conditions.

Features & Benefits:

- 160 x 120 (19,200) pixel focal plane array IR detector
- Temperature sensitivity of ±0.14°F (0.08°C) or better
- 4 in. (100mm) minimum focal distance allows close-up work
- Included 2GB MiniSD card stores images for later uploading to PC
- USB 2.0 and Video Out jacks
- Bright 3.5 in. diagonal flip-up color LCD
- Manually or automatically adjustable image level and span (brightness and contrast)
- Variable emissivity
- Tripod mount (via optional adaptor)
- Water, dust and oil-resistant to IP54 standard
- Shock and vibration-resistant
- Powered by rechargeable Li-ion battery
- 3 Year limited warranty
- Up to 5 hours of operation using 2 batteries



A hot-water valve, shot in the dark



Includes:

Camera; 2 Rechargeable Li-ion Batteries; AC

Adaptor; Compact Battery Charger; 2GB MiniSD Memory Card; SD Card Reader; Video Cable with

BNC Plug; USB 2.0 Cable; Bluetooth Headset with Charger (GTi30 only); Lens Cap; Analysis &

Reporting Software on CD; Calibration Certificate;

Hand & Neck Straps; Custom Hard Case; User's Manual: 3 Year Limited Warranty

Extra Batteries; Wide-Angle Lens with

38° Field of View; Telephoto Lens with

9° or 6.4° Field of View; Tripod Mount

Adaptor; Car Charger; Sun Shield

Optional Accessories:

An IR image of a water pump's motor

No. GTi10

Twanten .

No. GTi20 and No. GTi30



All three GTi thermal imaging cameras feature a large, bright color LCD and point-and-shoot simplicity



"PREDATOR" SERIES Thermal Imaging Cameras

	GTi10	GTi20	GTi30
"PREDATOR" SERIES FEATURES & SPECIFICATIONS		Ģ	
Picture-in-Picture Mode (Visual + Thermal Image Fusion)	No	Yes	Yes
Analysis Tools	2 Movable Spots, Isothermal Analysis	4 Movable Spots, Isothermal Analysis	9 Movable Spots, Isothermal Analysis Profile Analysis, 5 Area Analysis
Thermal Video Streaming	No	No	Yes (Via USB)
LED Flashlight	No	Yes	Yes
Voice Annotation	No	No	Yes (Via Bluetooth)
Temperature Alarms	No	Yes	Yes
Refresh Rate	30 frames per second (fps)	30 frames per second (fps)	30 frames per second (fps)
Visual Image Display Resolution	N/A	320 x 240 pixels	320 x 240 pixels
Visual File Format	No	CCD/JPG	CCD/JPG
Laser Pointer		Yes	•
Field of View		20° x 15°	
Spatial Resolution		2.2 mrad	
Temperature Measurement Range	-4° to 572°F (-2	20° to 300°C), upgradeable to 2	732°F (1500°C)
Thermal Sensitivity		±1.4°F (0.08°C) at 86°F (30°C)	
Detector Type	Uncoc	bled focal plane array, manual fo	
Accuracy		$\pm 3^{\circ}$ F (2°C) or 2% of reading	
IR Detector Resolution		160 x 120 pixels (19200 pixels)	
IR Detector Spectral Range		8 to 14um	
Focusing		Manual	
Measurement Compensation Factors	Emiseivity	, Ambient Temperature, Humidity	/ Distance
Minimum Focal Distance	Liniosivity	4 in. (100mm)	, Distance
Optional Telephoto and Wide-Angle Lenses	Voc. (6	.4°, 9° and 38° Field of View ava	ailabla
Display		Flip-up 3.5 in. diagonal color LCI	
Auto Hot/Cold Spot Indicator		Yes)
Video Output Formats		NTSC, PAL	
Color Palettes	Ironhow Iron	Inverted, Rainbow, Feather, Grey	Grou-Inverted
Image Storage Medium, Capacity		GB MiniSD memory card (include	
Thermal File Format		Proprietary SAT, Radiometric, JP	
Text Input	1	No	u
Battery		Rechargeable Lithium-lon	
Total Charge Capacity	l lin ti	5 hours continuous with 2 batt	arias
Power Saver Mode	Up to	Yes	6000
	40 40		0% PH
Operating Temperature	-4° to	122°F (-20° to 50°C) @ 10 to 9	U% KA
Water/Dust/Oil Resistance		IP54	
Shock Resistance		Operational 25G	
Vibration Resistance		Operational 2G	
Weight		1.3 lb. (580g)	
Dimensions		x 3.1 x 6.4 in. (172 x 80 x 162n	
Tripod Mount		Standard Base (Adaptor Optional)
External Power Source		AC Adaptor	
Limited Warranty Duration		3 Years	



80 White Street, New York, NY 10013-3567 TEL: 212. 431. 6100 TOLL FREE: 800. 697. 8665 sales@generaltools.com www.generaltools.com



Ruggedized Video Inspection System

GENERAL

The DCS280 is a ruggedized non-recording video scope featuring a 9mm diameter probe, image flip and video zoom

Ideal for inspecting hard-to-reach or hard-to-see areas of vehicles, industrial equipment or factories

Features & Benefits:

- Big, bright color LCD for crystal-clear real-time video imaging
- 9mm (0.35 in.) diameter x 1m (39 in.) long camera-tipped probe is thin enough to fit into very narrow spaces
- 2m and 3m long, 9mm diameter probes are available
- Super thin 5.5mm dia. probes in 1m, 2m and 3m lengths are also optionally available
- Probe is flexible-obedient, meaning it retains its shape
- All probes are oil, water and dust-proof to IP67 standard. The DCS280's wand-type grip and monitor are IP54 splash-proof.
- Adjustable LEDs in camera head illuminate dark areas
- Unit is drop-resistant to 1m height and comes in a protective hard case
- Invert what you see 180° to read labels right-side up and ZOOM video up to 200% to show details
- Pays for itself quickly: Avoid the cost and trouble of tearing down engines
- One-handed operation frees your other hand to use tools
- AV Out jack enables video connection to any NTSC television
- Includes four useful probe tip accessories

Applications:

- Inspecting cylinders, valves, diesel injectors and glow plugs
- Viewing behind body panels and under the dashboard for electrical wiring and connections problems
- Examining for corrosion and wear in hard-to-see areas
- Inspecting fluid lines and leaks



Long, thin probe reaches deep into tight spaces

No. DCS280



Find blockages or broken registers in A/C ductwork



Ruggedized Video Inspection System

Ideal for inspecting hard-to-reach and hard-to-see areas of vehicles, industrial equipment or factories

Specifications:

Display Size/Type: 2.4 in. (61mm) diagonal TFT color LCD

Display Resolution: 320 x 240 pixels

Monitor Controls: 180° flip, 1 to 2X zoom in 0.2 steps, brightness + and –

Probe Diameter/Type: 9mm (0.35 in.) flexible-obedient

Probe Length: 1m (39 in.)

Probe Field of View: 60°

Probe Depth of Field: 1 in. (25mm) to infinity

Camera Light Source: 2 adjustable-brightness white LEDs

Impact Resistance: To height of 1m (39 in.)

Water, Dust, Splash Resistance Levels: Camera-tipped probe designed to meet IP67; Grip and monitor designed to meet IP54

Operating Temperature/Humidity: 32° to 113°F (0° to 45°C) @ 5 to 95% RH

Dimensions of Console: 10 x 3.6 x 2.3 in. (254 x 91 x 58mm)

Weight of Console: 1 lb. (454g)

Dimensions of Case: 15 x 11 x 3.5 in. (381 x 279 x 89mm)

Weight of Case and Contents: 4 lb. (1.8 kg)

Power Source: 4 "AA" batteries (included)

Includes:

- Video Inspection System with Wand-type Grip and 2.4 in. (61mm) Color LCD Monitor
- 1m (39 in.) Long, 9mm (0.35 in.) Diameter Flexible-obedient Probe
- Four Probe Tip Accessories (Thread Protector, Magnetic Pickup, Pickup Hook, 45° Mirror)
- 4 "AA" Batteries
- Custom Hard Case
- User's Manual
- 3 Year Warranty



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The rugged DCS280 shrugs off the accidental bumps typical of industrial work



Any splashes from this wastewater plant would roll off the DCS280's back



Perfect for driveway mechanics





Ruggedized Recording Video Inspection System

The DCS350 is a ruggedized recording camera scope with voice annotation, internal memory and removable SD card

Ideal for visually inspecting and documenting hard-to-reach or hard-to-see areas of factory, system, equipment or vehicle and recording findings as still images or video with voice annotation. Design is ruggedized for industrial and automotive use. System includes 128MB internal memory, 2GB MicroSD card, and PC software.

Features & Benefits:

- Includes long (1m/39 in.), thin (12mm/0.47 in. diameter), flexible-obedient camera-tipped probe for looking deep into tight spaces. Also available are longer and thinner (9mm and 5.5mm) probes, and probe extensions that extend inspection range to 16 ft. (5m).
- All probes and extensions are oil, water and dust-proof to IP67 standard. The DCS350's grip and monitor are double-molded, making them drop-proof to 1m (39 in.) height and IP54 splash-proof.
- · Probe is flexible-obedient, meaning it retains its shape
- Has a 128MB internal memory for added versitility and convenience to the end user
- Has a built-in microphone to enable voice annotation, in addition to video and image recording
- Also includes a 2GB MicroSD card (upgradeable to 16GB), and a USB jack to maximize image and annotated video transfer
- 3.5 in. (89mm) diagonal color LCD shows crystal-clear videos and images
- · One-button video start/stop and photo capture
- Image flip and 1 4X zoom buttons
- Probe is in focus from 4 in. (102mm) to infinity
- Two adjustable LEDs illuminate dark areas
- TV Out jack and included cable send video and images to larger monitor
- Includes three probe tip accessories (magnetic pickup, pickup hook and 45° mirror)
- Adjustable Auto Power Off interval
- Comes in custom molded hard carrying case
- Powered by Alkaline or rechargeable "AA" batteries
- Choice of five menu languages
- 3 Year Warranty



Long, thin probe reaches deep into tight spaces



GENERAL'

No. DCS350



Ruggedized Recording Video Inspection System

Ideal for inspecting hard-to-reach and hard-to-see areas

Specifications:

Display Size/Type:

3.5 in. (89mm) diagonal TFT color LCD

Display Resolution: 320 x 240 pixels

Monitor Controls: 180° flip, 1 to 4X zoom in 0.5 steps, brightness + and –, start/stop video recording, take picture

Probe Diameter/Type: 12mm (0.47 in.) flexible-obedient

Probe Length: 1m (39 in.)

Probe Field of View: 60°

Probe Depth of Field: 4 in. (102mm) to infinity

Camera Light Source: 2 adjustable-brightness white LEDs

Impact Resistance: To height of 1m (39 in.)

Water, Dust, Splash Resistance Levels: Camera-tipped probe designed to meet IP67; Grip and monitor designed to meet IP54

Operating Temperature/Humidity: 32° to 113°F (0° to 45°C) @ 5 to 95% RH

Internal Flash Memory Capacity: 128MB

Maximum SD Card Capacity: 16GB

Includes:

- 1m (39 in.) Long, 12mm (0.47 in.) Diameter Camera-tipped Probe, Wand-type Grip and 3.5 in. (89mm) Color LCD
- 2GB MicroSD Card
- Three Probe Tip Accessories (Magnetic Pickup, Pickup Hook, 45° Mirror)
- ScopeView Video/Image Display Software + Driver on Mini-CD
- 4 "AA" Batteries
- Custom Hard Case
- User's Manual
- 3 Year Warranty



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Video Compatibilities: NTSC and PAL

Movie Resolutions: D1 NTSC (704 x 480 pixels), D1 PAL (704 x 576 pixels), QVGA (320 x 240 pixels)

Movie File Type: .avi

Photo Resolution/File Type: 720 x 480 pixels/.jpg

PC Interface: USB2.0

Auto Power Off Interval Options: 5, 15 or 30 minutes (or never)

Battery Life: >2 hours

Menu Languages: English, French, Spanish, Portuguese, Mandarin Chinese

Dimensions of Grip: 10.6 x 3.0 x 4.0 in. (270 x 75 x 100mm)

Weight of Grip: 1 lb. (454g)

Dimensions of Case: 15 x 11 x 3.5 in. (381 x 279 x 89mm)

Weight of Case and Contents: 4 lbs. (1.8 kg)

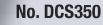
Power Source: 4 "AA" or rechargeable batteries (included)



The rugged DCS350 shrugs off the accidental bumps typical of industrial work



Avoid the time and hassle of engine teardowns





Inspecting a crawl space the quick and easy way



Find blockages or broken registers in A/C ductwork



Perfect for driveway mechanics



Waterproof Video Inspection Systems

DCS600 DCS660

SeaScope"

SeaScope™600 (DCS600) Non-recording SeaScope™660 (DCS660) Recording

Ideal for plumbing-related tasks such as inspecting submerged structures and basements or pipes carrying running water. Also suitable for inspecting the underside of boats. The first and only video inspection systems with an IP67 rated waterproof grip, monitor and camera-tipped probe

Features & Benefits:

- Makes it possible to inspect sewer and water lines carrying running water
- Enables a diver or snorkeler to view probe video under water in real time. Other "waterproof" inspection systems lack watertight grips and monitors
- · Also ideal for marine search and rescue operations
- Eliminates concerns about accidentally dropping or dunking grip or monitor into water
- Grip, probe and monitor are guaranteed leak-proof to depth of 1m (3.3 ft.); all three components will also resist leaks at depths up to 2m (6.6 ft.) for short periods (1 hour, max)
- Includes 10mm (0.39 in.) diameter x 1m (39 in.) long close-focus camera-tipped probe with adjustable LED lighting
- Probe is flexible-obedient, meaning it retains its shape
- 3.4 in. (87mm) color LCD makes videos large and crystal-clear
- Video can be inverted (rotated 180°) to make it easier to read labels and serial numbers
- Analog Video Out jack
- Powered by four "AA" batteries (not included)
- Additional Features for SeaScope™660
- Record time/date-stamped still images and videos on included 2GB MicroSD memory card
- Videos can be panned by joystick and zoomed up to 4X
- Includes USB jack and cable for PC connection
- 10-minute Auto Power Off

CE



Ideal for all plumbing-related inspections

SeaScope™ 600

SeaScope™ 660



Waterproof Video Inspection Systems



SeaScope™600 (DCS600) Non-recording SeaScope™660 (DCS660) Recording

Ideal for plumbing-related tasks such as inspecting submerged structures and basements or pipes carrying running water. Also suitable for inspecting the underside of boats. The first and only video inspection systems with an IP67 rated waterproof grip, monitor and camera-tipped probe

Specifications:

Camera-Tipped Probe Diameter, Length: 10mm (0.39 in.), 1m (39 in.)

Field of View: 54°

Depth of Field: 0.6 to 6 in. (15 to 150mm)

Camera Illumination: 2 white LEDs

Sensor Resolution: 640 x 480 pixels

Sensor Sensitivity: 1.8V/lux-sec

Display Type, Size: TFT, 3.4 in. (86.4mm) diagonal

Display Resolution: 320 x 240 pixels

Video Out Resolution: 640 x 480 pixels

Video Out Format: NTSC (DCS600), NTSC or PAL (DCS660)

Video Cable Length: 59 in. (1.5m)

Operating Temperature: 32° to 113°F (0° to 45°C)

Dimensions of Carrying Case: 13.0 x 10.5 x 4.5 in. (330 x 267 x 114mm)

Power Consumption: 400mA max @ 6VDC

Weight of Carrying Case with Instrument, Probe and All Accessories: 1.1 lb. (500g)

Power Source: 4 "AA" batteries (not included)

CE



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Includes:

Watertight grip, monitor and 1m long, 10mm diameter probe; Video cable; Set of three probe tip accessories (45° mirror, pickup hook and magnetic pickup); Hard plastic protective case, User's Manual, 1 Year Limited Warranty **DCS660** also includes 2GB MicroSD memory card, USB cable



There's no need to worry about dropping either SeaScope in a flooded basement



The entire SeaScope[™] system - including the grip, monitor and probe - is guaranteed watertight to a depth of 1 meter

SeaScope[™] 600

SeaScope[™] 660

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CE B

16



#SEEKER

DCS400-PE ETL Certified Video Inspection System & Probe

Video Over **Internet Capability**

The DCS400-PE is an ETL certified CAT III 1000V, CAT IV 600V wireless video and still image recording system

SERIES

Ideal for inspection of hard-to-reach or hard-to-see areas of equipment with exposed electrical wiring. Many potential applications in the electrical, plumbing, construction, restoration and HVAC/R industries.

Features & Benefits:

- Comes with a 14mm (0.55 in.) diameter x 1m (39 in.) long, electrically insulated, flexible-obedient, camera-tipped probe in focus from 1 in. (25mm) to infinity
- System is ETL certified for CAT III 1000V, CAT IV 600V use
- · Wireless interface with optional RCV100 module enables viewing of probe video on a PC and/or streaming it over the internet
- 3.5 in. (89mm) diagonal TFT-LCD wireless color monitor can be detached from the unit for remote viewing up to 10m (33 ft.) away
- Monitor features 3.2X zoom and 180° image flip buttons
- Both monitor and handle use rechargeable Lithium-Ion batteries which can be charged at the same time using the included two-into-one charging cable
- · View results in real-time, record video and capture/save still photos (JPEG) with instant playback review. Up to 3 hours of video (AVI).
- NTSC and PAL compatible
- Built-in magnets and stand facilitate hands-free operation
- Choice of 5 menu languages: English, French, Spanish, Chinese and Portuguese



No. DCS400-PE



The DCS400-PE makes it safe to inspect structures, like this open utility box on the street that may have been tampered with



A packaged DCS400-PE system

PE14



ETL Certified Video Inspection System & Probe

INIR

ESE

Ideal for inspection of hard-to-reach or hardto-see areas of equipment with exposed electrical wiring. Many potential applications in the electrical, plumbing, construction, restoration and HVAC/R industries.

Specifications:

DETACHABLE, WIRELESS MONITOR:

Display: 3.5 in. (89mm) diagonal TFT LCD Color Screen Display Resolution: 320 x 240 pixels (Video) 704 x 480 pixels (Stills, NTSC format) 704 x 576 pixels (Stills, PAL format) Dimensions: 3.9 x 3.3 x 1.0 in. (100 x 85 x 25mm) Weight: 6.1 oz. (172g)

Power Source: 1 Lithium-Ion rechargeable battery (included) Approvals: CE, FCC, ETL CAT III 1000V, CAT IV 600V

PISTOL GRIP:

Transmission Range: Up to 10m (33 ft.) Transmission Frequency: 2.4GHz Dimensions: 8.5 x 6.5 x 1.9 in. (215 x 165 x 50mm) Weight: 15 oz. (425g) Power Source: 1 Lithium-Ion rechargeable battery (included)

SYSTEM PROBE:

PE14 Electrically Insulated Probe:

- Camera-tipped with built-in adjustable LED lighting
 Flexible, strong and slim enough to perform
- electrical maintenance operationsOil, dust and waterproof to IP67 standard
- Retains configured shape to suit various inspection needs

PROBE SPECS:

Supplied Probe: 14mm (0.55 in.) diameter x 1m (39 in.) long Light Source: 2 adjustable high intensity LEDs Field of View: 60° Depth of Field: 1 in. (25mm) to infinity Operating Temperature: -50° to 257°F (-45° to 125°C)

INSULATED COVERING:

Tensile Strength: >12mPa Breakdown Voltage: 715kV/mm Electrical Volume Resistivity: 1 x $10^{14}\,\Omega\text{-cm}$ Elongation: >200%

Includes:

Pistol Grip with 1m Long, 14mm Diameter CAT III 1000V, CAT IV 600V, Insulated Flexible-obedient Probe, Detachable Wireless Monitor, 2GB MicroSD Memory Card, Three Probe Tip Accessories, USB and Video Interconnect Cables, Built-in Magnets, Two Lithium-Ion Rechargeable Batteries with AC Adapter/Charger, Custom Hard Case, User's Manual and 3 Year Limited Warranty



General Tools & Instruments 80 White Street, New York, NY 10013-3567 TEL: 212. 431. 6100 TOLL FREE: 800. 697. 8665 sales@generaltools.com www.generaltools.com Video Over Internet Capability No. DCS400-PE

No. PE14



Exposed wires leave no doubt that inspecting this distribution box could produce shocking results



Pipe & Duct Video Borescope Inspection System

. . . .

PA

No. DPS16

CE

RoHS

Complete System (DPS16) Probe & Reel Set only (P16PIP) DCS1600 Console only (H16)

Ideal for examining the interior of water pipes, sewer pipes, and HVAC ducts. Especially tailored for 2, 4 and 6 in. I.D. pipes by the included probe centering accessories.

Features & Benefits:

- 72 ft. (22m) long probe with 1.1 in. (28mm) diameter camera head
- Eight super-bright white LEDs give probe 640 x 480 pixel (VGA) resolution; superior optics yield excellent depth of field of 0.4 in. (10mm) to infinity
- Includes H16 the DCS1600 Video Borescope Handheld Recording Console
- \bullet Probe is water-tight to IP68 standard (depth of 33 ft./10m) and is flexible enough to make two 90° bends
- Stainless steel camera head is immune to bathroom toilet cleaner, unleaded gasoline, brake/transmission fluid and machine oil
- Steel probe reel is sturdy and dust-tight to IP65 standard, works vertically or horizontally, and holds the recording console



A probe's-eye view of a filthy air-conditioning duct



Tree roots cracking and invading a clay sewer pipe







Pipe & Duct Video Borescope Inspection System

Specifications:

CAMERA-TIPPED PROBE: Diameter: 0.23 in. (6mm) Length: 72 ft. (22m) Material: Fiberglass Camera Head Diameter: 1.1 in. (28mm) Light Source: 8 white LEDs Depth of Field: 0.4 in. (10mm) to infinity Field of View: 150.8° (diagonal) Waterproof Depth (IP68): 50 ft. (10m) Operating Temperature: 14° to 158°F (-10° to 70°C) Weight: 6.6 lb. (3kg)

REEL:

Frame Diameter: 11.8 in. (300mm) Dust and Water Resistance: To IP65 standard Operating Temperature: 14° to 158°F (-10° to 70°C) Weight: 6.6 lb. (3kg)

Included Accessories:

Probe Centering Ring: Inner Diameter: 1.1 in. (28mm) Outer Diameter: 2 in. (50mm)

Small Probe Centering Brush: Inner Diameter: 1.1 in. (28mm) Outer Diameter: 4 in. (100mm)

Large Probe Centering Brush: Inner Diameter: 1.1 in. (28mm) Outer Diameter: 6 in. (150mm)

Includes:

- P16PIP Pipe & Duct Inspection Probe & Reel Set (includes ring and brushes for centering probe in 2 in., 4 in. and 6 in. I.D. pipes)
- DCS1600 Video Borescope Handheld Recording Console (General Part No. H16)
- 2GB SD memory card
- RCA cable for viewing video and images on NTSC monitor
- AC adapter/battery charger and cleaning cloth and liquid for console
- Custom hard carrying case



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The probe is flexible enough to make two 90° bends in a 1.6 in. (40mm) diameter pipe



Monitoring the clearing of a clogged sewer drain



A packaged DPS16 system





No. H16



ALSO SOLD

SEPARATELY

No. P16PIP



2, 4 and 6 in. probe centering accessories





Borescope Probe Controllers

DCS1600 Handheld Recording Console

Add any QVGA (320 x 240 pixel) or VGA (640 x 480 pixel) resolution probe from General (see compatibility chart on next page) to create a high-performance video borescope inspection system

Features & Benefits:

- View hard-to-see and hard-to-reach areas on 3.5 in. (88.9mm) diagonal color monitor
- Record .avi video clips and .jpeg still images on removable SD cards. Review them instantly on-screen or later on your PC.
- Familiar menu/sub-menu user interface in choice of five languages
- Rechargeable Li-ion battery lasts for four hours
- TV Out (NTSC or PAL format) and USB jacks
- Click 'N Measure software available for sophisticated target analysis

Applications:

- Aircraft/vehicle inspection, maintenance and repair activities
- Military, security/law enforcement tasks
- Video/photo documentation of conditions and work

Includes:

2GB SD Card, Video and USB Cables, Rechargeable Li-ion Battery, AC Adapter/Charger, Custom Protective Hard Case, User's Manual, 1 Year Warranty

C E RoHS

Wireless Probe Handle/Controller

Makes a DCS1800ART system compatible with a nonarticulating probe or the P16HPART VGA Resolution Articulating Probe (see compatibility chart on next page). Does not include the DCS1800 Receiving Console.

Includes:

1 Year Warranty

CE F© RoHS



No. H16

Borescope Probe Controllers

HIGH PERFORMANCE PROBE COMPATIBILITY CHART							
PROBE CON	PROBE CONTROLLERS PROBES AND ACCESSORIES						
DCS1800-TR* DCS1800 Wireless Probe Handle/ Controller	H16 DCS1600 Handheld Recording Console	Probe Model No. (SKU)	Probe Description	UPC	Camera Head Diameter	Probe Length	Depth of Field
		• • •	Articulating Probe Options	•			
4	1	P16ART-1SM P16ART-2SM P16ART-3SM P16HPART	Soft Metal Articulating Probe	01418 9 01476 9 01500 1 01579 9	6.0mm (0.23 in.)	1m (3.28 ft.) 2m (6.6 ft.) 3m (9.8 ft.) 1m (3.28 ft.)	0.4 to 12 in. (10 to 300mm)
			Flexible-Obedient Probe Options			<u> </u>	
*	4	P16181SR-M P16182SR-M P16183SR-M	Flexible-Obedient Probe	01408 0 01409 7 01410 3	5.5mm (0.22 in.)	1m (3.28 ft.) 2m (6.6 ft.) 3m (9.8 ft.)	0.4 to 12 in. (10 to 300mm)
			Soft Metal Probe Options			<u> </u>	
*	4	P16181SM-M P16183SM-M P16185SM-M P161810SM-M P161830SM-M	Soft Metal Probe	01411 0 01412 7 01414 4 01414 1 01415 8	5.5mm (0.22 in.)	1m (3.28 ft.) 3m (9.8 ft.) 5m (16 ft.) 10m (32 ft.) 30m (98 ft.)	0.4 to 12 in. (10 to 300mm)
1	1	RP1618	Reel Stand for 5m, 10m and 30m Soft Metal Probes	01520 9			-
			Specialty Probe Options				
		P1839-M P16182-39 P16183-39 P1618FS-49	Ultra-Slim Flexible-Obedient Probe	01424 0 01556 8 01557 5 01481 3	3.9mm (0.15 in.)	1m (3.28 ft.) 2m (6.6 ft.) 3m (9.8 ft.) 1m (3.28 ft.)	0.25 to 6 in. (6.4 to 150mm)
*	1	P16182-49 P16183-49 P16181HP	Switchable Front/Side View Flexible-Obedient Probe	01554 4 01553 7 01576 6	4.9mm (0.19 in.)	2m (6.6 ft.) 3m (9.8 ft.)	0.4 to 12 in (10 to 200mm)
		P16181HP P1618SV-1SM	Side View Soft Metal Probe	015766	5.5mm (0.22 in.)	1m (3.28 ft.) 1m (3.28 ft.)	0.4 to 12 in. (10 to 300mm) 0.25 to 6 in. (6.4 to 150mm)
		P1618SV-1SR P16PIP	Side View Side View Side View Side View Flexible-Obedient Probe Pipe & Duct Inspection Probe & Reel Set	01406 6	28mm (1.1 in.)	1m (3.28 ft.) 22m (72 ft.)	0.25 to 6 in. (6.4 to 150mm) 0.4 in. (10mm) to infinity
	5.5mm Probe Tip Accessories						
		DCS1618M	Click 'N Measure Software and Measuring Tip	01395 3			_
4	1	PM003	Set of 3 Mirrored Viewing Tips (70°, 90°, 110°) Compatible with all 5.5mm probes except the P16181HP	01370 0	—	—	—

* DCS1800-TR enables DCS1800ART owners to add a non-articulating probe or the P16HPART VGA Resolution Articulating Probe; DCS1800-TR does not include DCS1800 Receiving Console



The DCS1800-TR working with the P16181HP VGA Resolution Probe (DCS1800 Receiving Console not included)



GENERAL

General Tools & Instruments 80 White Street, New York, NY 10013-3567 TEL: 212. 431. 6100 TOLL FREE: 800. 697. 8665 sales@generaltools.com www.generaltools.com The H16 working with the P16HPART VGA Resolution Articulating Probe



VGA Resolution Probe

Ideal for capturing high-quality (640 x 480 pixel) video and images of hard-to-reach or hard-to-see areas and equipment. Light boost, anti-reflection and image rotation functions extract clear images from even the darkest spaces.

Features & Specifications:

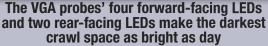
GENERAL[®]

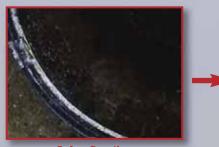
- Six super-bright white LEDs-four front-facing, two sidefacing- support 640 x 480 pixel (VGA) resolution video and still images
- 39 in. (1m) long, 0.22 in. (5.5mm) diameter probe goes deep into tight spaces
- Light boost, anti-reflection and 90° image rotation buttons on handle
- Superior optics tailored for close-focus viewing from 0.4 in. to 12 in. (10 to 300mm) over 60° (diagonal) field of view
- 0.78 in. (20mm) long stainless steel camera head is immune to bathroom toilet cleaner, unleaded gasoline, diesel fuel, brake/ transmission fluid and machine oil
- Probe is waterproof to IP67 standard
- 110° mirrored viewing tip

• Dimensions of Handle: 5.47 x 1.38 x 1.26 in. (139 x 35 x 32mm)

• Weight: 7.76 oz. (220g)









Before Boosting Brighter Image after Boosting The light boost function of a VGA resolution probe Compatible with General's DCS1600, DCS1600ART and DCS1800 high-performance video borescope inspection systems, H16 handheld recording console and DCS1800-TR wireless probe handle/controller

No. P16181HP

[Z]



VGA Resolution Articulating Probe

Ideal for capturing high-quality (640 x 480 pixel) video and images of hard-to-reach or hard-to-see areas and equipment. Light boost, anti-reflection and image flip functions extract clear images from even the darkest spaces.

Features & Specifications:

- Five super-bright white LEDs-three front-facing, two side-facing- support 640 x 480 pixel (VGA) resolution video and still images
- 39 in. (1m) long, 0.23 in. (6mm) diameter probe goes deep into tight spaces
- Probe articulates 155° up and 155° down with radius of 50 ± 5 mm
- Light boost, anti-reflection and 90° image rotation buttons on handle
- Superior optics tailored for close-focus viewing from 0.4 in. to 12 in. (10 to 300mm) over 87° (diagonal) field of view
- 0.9 in. (23mm) long stainless steel camera head is immune to bathroom toilet cleaner, unleaded gasoline, diesel fuel, brake/ transmission fluid and machine oil
- Probe is waterproof to IP67 standard
- 70° mirrored viewing tip
- Dimensions of Handle: 5.47 x 1.38 x 1.26 in. (139 x 35 x 32mm)
- Weight: 7.76 oz. (220g)



An articulating probe is a must for inspecting densely packed aircraft engines



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Before pressing anti-reflection button (with mirror) The anti-glare function of a VGA resolution probe



After pressing anti-reflection button (with mirror)

No. P16HPART

Compatible with General's DCS1600, DCS1600ART and DCS1800 high-performance video borescope inspection systems, H16 handheld recording console and DCS1800-TR wireless probe handle/controller



The 310° sweep of the P16HPART makes it possible to view areas "behind" the probe tip



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0051100



High-performance Video Borescope System

System Includes 4.9mm Switchable Front/Side View Probe

Ideal for aircraft/automotive/industrial inspection, maintenance and repair or military/law enforcement applications

Features & Benefits:

- Super-slim 4.9mm (0.19 in.) diameter switchable probe enables user to toggle between front and side views with the push of a button in a narrow space
- Overmolded console with ergonomic construction provides extra ruggedness and comfortable grip
- · Rotate the probe when it's in side view mode to get a 360° view
- Minimum focal distance of 0.25 in. (6.4mm) enables extreme close-up viewing
- Console also accepts any of General's QVGA (320 x 240 pixel) resolution borescope probes, including the ultra-slim 3.9mm (0.15 in.) diameter probe

Applications:

- · Inspecting cylinders, valves, diesel injectors and glow port plugs
- Looking behind body panels and under the dashboard to optimize cable routing
- Checking for corrosion and wear in hard-to-see areas
- Inspecting fluid lines for leaks

CE





Inspecting the coolant passages of an engine block through the hole of a freeze/casting plug

High-performance Video Borescope System

System Includes 4.9mm Switchable Front/Side View Probe

Specifications:

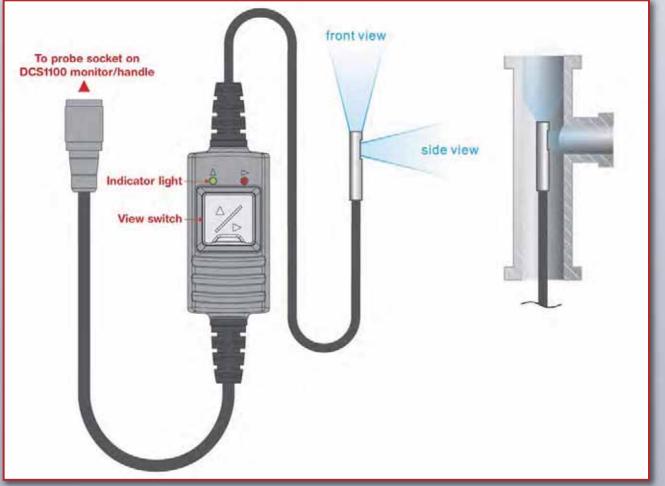
GENERAL

CONSOLE:

Display: Type: Thin-film transistor (TFT) liquid crystal Size: 2.4 in. (61mm) diagonal Resolution: 320 x 240 pixels
Estimated Battery Life: 8 hours
Operating Temperature: 32° to 140°F (0° to 60°C)
Storage Temperature: 32° to 140°F (0° to 60°C)
Dimensions: 3.68 x 8.25 x 2.26 in. (93.5 x 209.5 x 57.5mm)
Weight (w/battery): 12.6 oz. (357g)
Power Source: 4 "AA" batteries (included)
Approvals: CE, RoHS

PROBE:

Diameter: 0.19 in. (4.9mm) Length: 39 in. (1m) Operating Temperature: 32° to 131°F (0° to 55°C) Water Resistance: To IP57 standards Head Material: Stainless steel Minimum Focal Distance: 1/4 in. (6.4mm) Depth of Field: Horizontal Field Angle: 45.2° Vertical Field Angle: 34° Diagonal Field Angle: 56° Light Source: 3 LEDs, each w/ luminous intensity of 140 to 224 mcd (millicandelas) Weight: 15 oz. (425g)



Rotating the probe gives the side view camera full 360° coverage of the inside of a pipe - like a submarine periscope scanning the horizon

GENERAL

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Console, P1618FS-49 Probe, 4 "AA" Batteries, Hard Carrying Case, User's Manual and 1 Year Warranty

Includes:



Data Logging Hot Wire Anemometer w/ CFM/CMM and 8:1 IR Thermometer

GENERAL

CIH20DL

Ideal for measuring speed, volume and temperature of slow-moving air

Features & Benefits:

- Data logging capacity: 20,000 data points via USB interface
- Measures air flow volume up to 2.5 million CFM (72,000 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
- 8:1 IR thermometer with laser pointer has measurement range of -25° to 999°F (-32° to 537°C)

Includes:

USB cable, PC Interface Software, AC Adapter, 1 "9V" Battery, Hard Carrying Case, User's Manual and Warranty



No. CIH20DL



Large backlit LCD simultaneously displays air flow volume or speed from hot wire sensor plus remote surface temperature from IRT



Data Logging Hot Wire Anemometer w/ CFM/CMM and 8:1 IR Thermometer

Ideal for measuring speed, volume and temperature of slow-moving air

Specifications:

Air Flow Volume Measurement Range/Resolution: 0 to 2,542,700 CFM (0 to 72,000 CMM)/0.01 CFM (0.001 CMM)

Air Speed Measurement Range: 2.0 to 7874 ft./min (20mm/sec to 40m/sec)

Air Speed Measurement Accuracy: ±3% + 5.9 ft./min (0.03m/sec)

IRT Distance-To-Spot (D:S) Ratio: 8:1

IRT Emissivity: 0.95 (fixed)

IRT Measurement Range: -25° to 999°F (-32° to 537°C)

 $\begin{array}{l} \mbox{IRT Measurement Accuracy:} \\ \pm 5.4^\circ \mbox{F} (\pm 3^\circ \mbox{C}) \mbox{ from } -25^\circ \mbox{ to } -4^\circ \mbox{F} (-32^\circ \mbox{ to } -20^\circ \mbox{C}); \\ \pm 3.6^\circ \mbox{F} (\pm 2^\circ \mbox{C}) \mbox{ from } -4^\circ \mbox{ to } 212^\circ \mbox{F} (-20^\circ \mbox{ to } 100^\circ \mbox{C}); \\ \pm 2\% \mbox{ from } 212^\circ \mbox{ to } 999^\circ \mbox{F} (100^\circ \mbox{ to } 537^\circ \mbox{C}) \end{array}$

IRT Measurement Resolution: 0.1°(F or C)

IRT Response Time: 0.5 seconds, max

Hot Wire Sensor Temperature Measurement Range/Accuracy: 32° to $158^{\circ}F$ (0° to $70^{\circ}C$)/ $\pm 1.5^{\circ}F$ ($\pm 0.8^{\circ}C$)

Resolution: 0.1°F (0.1°C)

Memory: Nine readings + Max/Min/Avg + Data Hold

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: 11.3 oz. (320g) Power Source: 1 "9V" battery (included)

ROHS X CE



CIH20DL



No. CIH20DL

A low-speed squirrel cage blower motor



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Enables minimally invasive duct flow testing



Air movers wrapping up a water damage restoration project





USB Humidity-Temperature Data Loggers

TEMP

MODE

GENERAL HTTO

HT10 HT20 HT50

Data Logger w/ LEDs (HT10) Data Logger w/ LCD (HT20) Data Logger w/ LCD + IRT (HT50)

These data loggers can be deployed on a job site or in key areas of a facility and left unattended for days, weeks or months. The temperature and humidity readings they make and collect can be uploaded to a PC and viewed in Excel, making it easy to spot trends and unexpected excursions.

Applications:

- Water damage restoration Units can be deployed and left in place over duration of the job to monitor the drying process
- **Process control** Simpler, more cost-effective monitoring of office buildings, greenhouses, food and equipment storage facilities, wineries, freezers, shipping containers, HVAC/R installations, computer rooms, labs, libraries and museums
- Electronics manufacturing Monitor and/or data log RH/temp to control high-voltage static discharge

Features & Benefits:

- One button starts/stops logging without a PC
- Units are setup on PC, but will not initiate data logging until user activates
- Automatically syncs to your computer's clock; no need to set date and time
- USB interface; no need for cables, cradles or docks
- Included interface software enables setting of: Sampling time from 10 seconds to 12 hours; Hi/Lo alarm setpoints for humidity and ambient temperature, Temperature unit (°F or °C)
- · Software also calculates dew point
- Uploaded data logs viewable as table or graph
 One-click exporting of data logs to Excel or Word
- LCD displays real-time humidity and temperature readings and device working status (HT20 and HT50 only)
- IRT with 2:1 D:S ratio enables spot-checking of surface temperatures (HT50 only)

Includes:

Battery, Windows[®]-compatible Software, USB Extension Cable, User's Manual and 1 Year Warranty THERMOMETER

999

Magnetic back for easy storage and deployment



Monitor water damage restoration

No. HT10

No. HT20

No. HT50

STO

SET



USB Humidity-Temperature Data Loggers

Monitor greenhouse temperature and humidity

Specifications:			
Model #	HT10	HT20	HT50
Name	USB Temperature- Humidity Data Logger	USB Temperature- Humidity Data Logger with LCD Display	USB Temperature- Humidity Data Logger with LCD Display and IR Thermometer
Temperature Measurement Range/Accuracy	-4° to 158°F (-20° to 70°C) ±0.7°F (0.4°C)	-4° to 158°F (-20° to 70°C) ±0.7°F (0.4°C)	-4° to 158°F (-20° to 70°C) ±0.7°F (0.4°C)
Temperature Measurement Res- olution and Repeatability	±0.2°F (0.1°C)	±0.2°F (0.1°C)	±0.2°F (0.1°C)
Relative Humidity (RH) Measurement Range/Accuracy	10 to 90% ±3%	10 to 90% ±3%	10 to 90% ±3%
RH Measurement Resolution and Repeatability	±0.1%	±0.1%	±0.1%
Internal Storage Capacity	8,000 pairs of RH & temp readings	8,000 pairs of RH & temp readings	8,000 pairs of RH & temp readings
IRT Measurement Range	N/A	N/A	-4° to 482°F (-20° to 250°C)
IRT Measurement Accuracy	N/A	N/A	±5°F (3°C) below 32°F (0°C) ±4°F (2°C) above 32°F
IRT Measurement Resolution	N/A	N/A	±0.2°F (0.1°C)
IRT Distance-to-Spot Ratio	N/A	N/A	2:1
Emissivity	_	_	0.95 (fixed)
IRT Response Time	_	_	0.5 seconds
Dimensions	4.96 x 1.10 x 2.01 in. (126 x 28 x 51mm)	4.96 x 1.10 x 2.01 in. (126 x 28 x 51mm)	4.92 x 1.69 x 0.91 in. (125 x 43 x 23mm)
Weight	<7 oz. (<200g)	<7 oz. (<200g)	<7 oz. (<200g)
Power Source	3.6V Non-rechargeable Lithium-Ion Battery (Type SB-AA02)	3.6V Non-rechargeable Lithium-Ion Battery (Type SB-AA02)	3.6V Non-rechargeable Lithium-Ion Battery (Type SB-AA02)
What's Included	Battery, Software, USB Extension Cable, User's Manual	Battery, Software, USB Extension Cable, User's Manual	Battery, Software, USB Extension Cable, User's Manua
Battery Life (typical)	1 year	1 year	1 year
Warranty	1 year	1 year	1 year



No. HT20

No. HT50



Monitor the drying part of water damage restoration



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Monitor a climate-controlled food warehouse



Monitor storage facility temperature and humdity



IRT Measurement button

30



Laser Distance Meter 200 ft. (60m) Range

The LDM60 is a professional-grade, lightweight, pocket-sized laser distance meter with a 200 ft. range, $\pm 1/16$ in. (1.5mm) precision, and uses Pythagorean geometry to determine areas, circumferences and volumes

Ideal for contractors, carpenters, painters, realtors and HVAC/R specialists who need to measure lengths, widths, heights, areas and volumes quickly and accurately

Features & Benefits:

- 200 ft. (60m) range
- Typically saves enough time to pay for itself in weeks
- Eliminates need to rearrange a room to measure it; laser shoots over furniture and behind curtains
- \bullet Eliminates measurement errors; laser's accuracy is ± 0.06 in. ($\pm 1.5 mm$)
- Turns many two-person jobs into one-person jobs
- Displays distances in meters or feet
- Calculates areas, circumferences and volumes
- Uses Pythagorean geometry to make indirect measurements
- Large backlit 4-line LCD
- Addition, subtraction, continuous measurement (tracking) and min/max distance (to a reference) modes
- Fast response time
- 20 measurement memory
- References measurements from front, rear or end piece
- Auto power off
- Splashproof and dustproof to IP54 standard
- Pocket-sized and lightweight
- Powered by two "AAA" batteries



With a tape measure, it takes two people to measure the length of electrical conduit



A laser instrument takes the tedium out of laying out and installing framing









Laser Distance Meter 200 ft. (60m) Range

Specifications:

Measurement Range (indoor): 0.33 to 197 ft. (0.1 to 60m)

Measurement Accuracy: ±0.06 in. (±1.5mm)

Resolution: 1mm (0.04 in.)

Display Unit: ft. or m

Response Time: 0.33 seconds

Laser Source: Class 2M II, 635nm, < 1mW

Operating Modes: Addition, Subtraction, Circumference, Surface area, Volume, Continuous measurement (Tracking), Max/Min distance, Indirect (Pythagorean) measurement

Display: 4-line backlit LCD

Memory: 20 measurements

Splashproof and Dustproof: To IP54 standard

Auto Power Off: After 3 minutes of inactivity

Battery Life: 3000 measurements, typical

Operating Temperature: 32° to 104°F (0° to 40°C)

Storage Temperature: -14° to 158°F (-25° to 70°C) @ <85% R.H.

Dimensions: 4.3 x 1.9 x 1.1 in. (110 x 48 x 28mm)

Weight: 3 oz. (84g) without batteries or holster

Power Source: 2 "AAA" batteries (included)

Applications:

- Measuring indoor distances (flooring, plumbing rough-in and piping design, electrical conduit design and placement, framing, crown molding installation, etc.)
- Measuring indoor heights (general contracting, estimating, etc.)
- Measuring square footage (realty applications, purchasing of carpet, tile, flooring, paint and wallpaper, etc.)
- Measuring volume (calculating heating/air conditioning loads, etc.)
- Measuring heights and widths from a distance using indirect (Pythagorean) measurements (construction, trim carpentry, etc.)

Includes:

Toolbelt Holster, 2 "AAA" Batteries, User's Manual and 3 Year Warranty



Building a deck requires many precise measurements



Calculating the volume of a big, oddly shaped room is child's play for the LDM60

No. LDM60



General Tools & Instruments 80 White Street, New York, NY 10013-3567 TEL: 212. 431. 6100 TOLL FREE: 800. 697. 8665 sales@generaltools.com www.generaltools.com **AC Circuit Breaker Finder**

No. BF10

CE

۵

BF10

Ideal for quickly identifying individual branch circuits and wiring faults without interrupting power. Includes receptacle tester with auto sense feature.

It's now easy to identify the circuit breaker associated with any 110V AC outlet. Start by plugging the transmitter unit into any 110V GFCI or non-GFCI receptacle. After checking the outlet for several common wiring errors, the transmitter sends an RF signal down the circuit's wires back to the breaker box. At the breaker box, begin scanning with the receiver unit. A green LED on the receiver will light, and the socket that the transmitter is plugged into will be identified. A patented circuit in the BF10 eliminates the "false positives" that weaker technologies like inductive coupling often produce.

Features & Benefits:

• Fully automatic operation turns two-man jobs into one-man jobs

GENERAL

- Locates the breaker associated with any 110V AC outlet without tripping the breaker
- Local socket test
- · Identifies any outlet wiring faults
- ETL rated CAT II 600V, CAT III 300V
- Built-in flashlight for use in dark areas
- Compatible with GFCI receptacles
- Audible and visual (LED) indications
- Low battery warning
- CE approved
- Wiring Fault Indications: Correct Wiring Missing Earth Missing Neutral Live & Earth Reversed Live & Neutral Reversed Open Circuit



Finding a breaker associated with an outlet is as easy as waving a wand



Transmitter is also a socket tester



AC Circuit Breaker Finder

Ideal for quickly identifying individual branch circuits and wiring faults without interrupting power. Includes receptacle tester with auto sense feature.

Specifications:

Designed To Safety Standard IEC 61010-1: CAT II 600V CAT III 300V

GENERAL®

Dimensions:

Transmitter: 2.8 x 2.5 x 2.3 in. (71 x 64 x 58mm) **Receiver:** 7.4 x 1.8 x 1.5 in. (188 x 46 x 38mm)

Weight: Transmitter: 2.1 oz. (60g) Receiver: 4.3 oz. (122g)

Receiver Power Source: 1 "9V" battery (included)

Includes:

Battery, Carrying Case, Operating Instructions and Warranty



Transmitter/Socket Tester



Built-in flashlight lights up dark areas



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Ideal for pinpointing the location of electrical cables and metal, water, or gas pipes behind walls, above ceilings or under floors. Can also trace circuits, detect open- and short-circuits, find outlets covered by plaster, identify a circuit's breaker, and locate blockages in plastic pipes.

Features & Benefits:

GENERAL

- Makes it safe to break through any wall by revealing and locating hidden infrastructure up to 6.6 ft. (2m) behind it
- Eliminates need to find and read construction drawings before starting a job
- Transmitter and receiver communicate on any of eight channels and display readings on a big, bright, multi-function graphic LCD. Both units also include a flashlight (for illuminating dark areas) and a buzzer that can be muted.
- Makes it easy to identify the breaker associated with an energized or de-energized AC outlet
- Transmitter can also operate as an AC/DC voltmeter with a range of 12 to 600V
- Transmitter has three power levels; receiver has variable sensitivity
- Receiver's display can be backlit
- · Compatible with one- or two-pole circuits
- Second transmitter is available to make locating short-circuits and cable leaks more accurate
- Used with a metal rod, system can locate blockages and constrictions in plastic pipes
- Transmitter is powered by one 9V battery; receiver by six "AAA" batteries

Includes:

Batteries, Accessories, Soft Carrying Case, 1 Year Limited Warranty



Locating a circuit breaker



CL10 CABLE LOCATOR RECEIVER

EVEL

ANUA

SE 15 10 W

m

UAC

No. CL10



Transmitter



Tracing a cable behind a wall

Receiver



Cable & Pipe Locator

Specifications:					
Transmitter	Output Frequency		125 kHz		
	Measurement Ra in Voltmeter Mod		12 to 600VDC or VAC (@60Hz)/±2.5%		
Terrand I	Display		LCD, with function display and column chart		
	Overvoltage Rating		CAT III 300V		
	Current Consumption		31mA (min), 115mA (max)		
HCC	Operating Temperature		32° to 104°F (0° to 40°C) @ 80% RH		
-	Storage Temperature		-4° to 140°F (-20° to 60°C) @ 80% RH		
	Dimensions		7.5 x 3.5 x 1.7 in. (190 x 89 x 42.5mm)		
	Weight	Without battery	12.7 oz. (360g)		
		With battery	14.8 oz. (420g)		
	Power Source		1 "9V" battery		
Receiver	Tracking Depth (max)		In cable locating mode: 2m for one-pole circuit, 0.5m for two-pole circuit, 2.5m for single-loop line; in grid voltage identification mode: 0.4m		
	Display		LCD, with function display and column chart		
ERATER 1	Current Consumption		32mA (min), 89mA (max)		
	Operating Temperature		32° to 104°F (0° to 40°C)) @ 80% RH		
	Storage Temperature		-4° to 140°F (-20° to 60°C) @ 80% RH		
	Dimensions		9.5 x 3.1 x 1.5 in. (242 x 78 x 39mm)		
	Weight	Without batteries	9.9 oz. (280g)		
		With battery	12.3 oz. (350g)		
	Power Source		6 "AAA" batteries		

Includes:

Transmitter, Receiver and 1 set of 5 ft. (1.5m) Long Red and Black Test Leads with 1 Pair Each Attachable Test Probes and Alligator Clips. Also includes Grounding Rod, 1 "9V" Battery, 6 "AAA" Batteries, User's Manual, Soft Carrying Case and a 1 Year Limited Warranty





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Durable, Soft Canvas Carrying Case



Includes: A Grounding Rod and 1 set of 5 ft. (1.5m) Long Red and Black Test Leads with 1 Pair Each Attachable Test Probes and Alligator Clips



AC Circuit Analyzer

Ideal for identifying 110/220VAC power circuit and wiring problems that can cause shocks, sparks, fires, equipment failures and poor equipment performance

Features & Benefits:

 Measures a branch circuit's line voltage, peak voltage and neutral-to-ground voltage

GENERAL®

- Calculates a circuit's voltage drop in response to 12A, 15A and 20A loads
- Measures the impedance of hot, neutral and ground conductors as well as available short-circuit current (ASCC)
- Identifies wiring configurations and detects wiring faults and missing ground wires
- Tests the reliability and response time of GFCIs (ground fault circuit interrupters) and RCDs (residual current devices)
- Displays True RMS readings of all voltages except peak voltages
- Works with 2- and 3-phase circuits
- Jumbo LCD with 30-second backlight
- Familiar menu/sub-menu operation
- Data HOLD button and 30-minute auto power off
- Powered by six "AAA" batteries (included)
- 1 year limited warranty



The short test cable improves voltage-drop measurement accuracy





AC Circuit Analyzer

Ideal for identifying 110/220VAC power circuit and wiring problems that can cause shocks, sparks, fires, equipment failures and poor equipment performance

Specifications:				
Parameter	Measurement Range	Measurement Accuracy	Display Resolution	
Line Voltage	85 to 265VAC	± 1.0% ± 0.2V	0.1V	
Peak Voltage	121 to 374VAC	± 1.0% ± 0.2V	0.1V	
Line Frequency	45 to 65 Hz	± 1.0% ± 0.2Hz	0.1Hz	
Voltage Drop	0.1 to 99.9%	± 2.5% ± 0.2%	0.1%	
Load Voltage	10 to 265V	± 2.5% ± 0.2V	0.1V	
Neutral-to-Earth Voltage	0 to 10VAC	± 2.5% ± 0.2V	0.1V	
Hot, Neutral and Ground Line	0 to 3 Ω	$\pm 2.5\% \pm 0.02\Omega$	0.01Ω	
Impedance	>3Ω	NA		
GFCI Triggering Time	1ms to 6.5 sec.	± 1.0% ± 2ms	1ms	
RCD Triggering Time	1ms to 6.5 sec.	± 1.0% ± 2ms	1ms	
RCD Triggering Current	30 to 37mA	± 1.0% ± 0.2mA	0.1mA	
Operating/Storage Temperature 32° to 122°F (0° to 50°C) @ <80% RH				
Dimensions	7.6 x 3.1 x 1.5 in. (193 x 7	6 x 3.1 x 1.5 in. (193 x 78 x 39mm)		
Weight (without Batteries)	10.4 oz. (295g)			

Includes:

12 AWG, 20 in. (0.5m) Long Test Cable, Six "AAA" Batteries, Soft Carrying Case, User's Manual, 1 Year Limited Warranty

GENERAL®



LCD is backlit for easy reading in dark places



General Tools & Instruments 80 White Street, New York, NY 10013-3567 TEL: 212. 431. 6100 TOLL FREE: 800. 697. 8665 sales@generaltools.com www.generaltools.com

The CA10 comes with a durable, soft canvas carrying case

GENERAL

CA10

CIRCUIT ANALYZER

TEST

0

FUNC

HOLD



15A AC Line Splitter

Ideal for attaching a clamp meter to an AC line carrying up to 15 Amps without separating its conductors

GENERAL

Features & Benefits:

- Improves safety by eliminating the need to separate (and thereby damage) AC line cords in order to measure current using a clamp meter
- Two clamp positions/sensitivities: x1 for direct readings; x10 for low-current measurements
- Includes voltage checkpoints outlet

Specifications:

Maximum Line Voltage/Current: 120 VAC/15 Amps

Coil Opening: 1 x 1 in. (25 x 25mm)

Coil Loops: x1 and x10

Operating Temperature: 14° to 140°F (-10° to 60°C) @ <80% RH

Weight: 3.53 oz. (100g)

Includes:

Operating Instructions and Warranty



The ACL10 can effectively separate the conductors of any 110V power cord



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No. ACL10





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