

2017-2018
Focus Products
Catalog



## **Tested By The Best**

Tested by Fluke Labs
Safety certified by Work of the South State of th



#### **Focus Products Catalog 2017-2018**

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#### No Hassle Warranty

MT-10 Moisture meter

No waiting. No shipping charges.

Amprobe is committed to delivering the highest quality test and measurement products and provides a 1 year warranty with most products. The length of the product warranty is stated in the user manual that comes with each product, which can be downloaded from **amprobe.com**.

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To better serve you, in the unlikely event that an Amprobe product requires warranty service, Amprobe authorizes over-the-counter

product exchange from the authorized Amprobe distributor for which the product was purchased, within 30 days from the date of purchase for products with a list price up to \$500. For products with a list price greater than \$500 or for issues encountered after the first 30 days but within the warranty period, please contact the Amprobe Service Department at 1-877-AMPROBE for warranty services.

#### **AT-3500 Underground Cable/Pipe Locator System**

Keep productivity high and operational costs low, with the AT-3500. This rugged, economical solution helps you locate underground energized and de-energized wires, cables and pipes. Great for parking lot and airport lighting applications, it precisely pinpoints buried services, with exceptionally fast sound and meter response.

- Precisely pinpoint buried cables and wires
- Three testing modes for best accuracy:
- Passive power (50 Hz / 60 Hz)
- Passive radio (RF)
- Active T-3500 signal generator with induction mode directly connected to the cable with test leads or optional clamp
- Proven 33 kHz frequency for most locating applications
- · Avoid lines at utility construction sites with highly sensitive power and radio modes
- Take depth measurements up to 16' (4.9m)
- Backlit multiple-segment digital display with audible alerts to show and tell location of buried cables
- Semi-automatic gain control for fast signal location and control



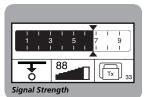
| FEATURES                          | AT-3500  |  |
|-----------------------------------|--|--|
| Depth Measurement                 | 16 ft (4.9 m)  |  |
| Passive Tracing Frequencies       | 50 Hz / 60 Hz  |  |
| Transmitter Frequency             | Single, non-adjustable   |  |
| Receiver Active Frequencies (Hz)  | 32.768 kHz   |  |
| Receiver Passive Frequencies (Hz) | Range 1: radio 15 kHz to 23 kHz<br>Range 2: power network 50 Hz / 60 Hz; optionally 100 Hz<br>(can be adjusted by Amprobe service personnel) |  |
| Receiver Depth Display Accuracy   | Range 1: radio +/- 20%<br>Range 2: power network +/- 20%<br>Range 3: transmitter +/- 5% (>5 m (6 ft),<br>+/- 20% (<5 m (15 ft)               |  |
| Receiver Depth Range              | Maximum 16 ft (4.9 m)  |  |

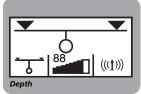
#### \*\*\*\* **TOP RATED**

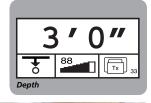
#### "Great for finding depth and location"

"I've used one for years locating phone and gas lines and it works great. I can find and track wire or pipe and also know how deep within a few inches for digging and locating."

- AT-3500 customer reviews





















#### \*\*\*\* TOP RATED

#### "Great Tracer"

"I still have a lot to learn about this kit but am very satisfied with my purchase and it will be a very useful tool for years to come."

"This circuit breaker tracer works perfectly but you MUST follow the instructions. The unique autocalibration system ensures that the correct breaker is identified every time without any false indications."

- AT-7000 customer reviews

#### AT-7000 Advanced Wire Tracer

Get accurate results in minutes with new features and technologies that simplify wire tracing and breaker identification. The Receiver's patented Smart Sensor™, with its innovative new antenna design and advanced signal processor, clearly displays the location and orientation of energized wires in walls, floors and ceilings on the large color TFT LCD screen. The powerful Transmitter utilizes two optimal frequencies for both energized and de-energized wire and breaker tracing, delivering consistently accurate results for novice users and experts alike. The new Scan and Locate feature clearly identifies the one correct breaker or fuse, eliminating the confusion from multiple false positive readings, common in older technology tracing tools.

- · Traces wires in walls, ceilings, floors and corners
- Locates breakers and fuses
- Pinpoints shorts and opens
- High resolution 3.5" TFT LCD color display
- Three power modes
  - "High" power mode for normal circuits
- "Low" power mode for precision tracing in difficult areas
- "Clamp" power mode provides a boosted signal using signal clamp
- · Two automatically selected frequency modes for optimal tracing on energized and de-energized circuits
- Signal booster rechargeable battery pack (BR-7000-T) increases transmitter signal strength
- Clamp-on attachment (SC-7000) for inducing signal into wires without access to bare conductors
- Embedded help screens make set-up easy and error free

| FEATURES          |   | AT-7020 | AT-7030 |
|-------------------|---|---------|---------|
| T5 10             | Traces energized and de-energized wires   | •       | •       |
| ar.               | Locates energized and de-energized breakers and fuses   | •       | •       |
| tand<br>eatu      | Finds shorts and opens  | •       | •       |
| 0, =              | Non-contact voltage detection   | •       | •       |
|                   | Smart Sensor™- wire position and direction indicator  | •       | •       |
| v                 | "Scan and Locate" breaker finder  | •       | •       |
| Advanced Features | Two frequency modes for optimal tracing in energized (6 kHz) and de-energized (33 kHz) circuits | •       | •       |
| 유                 | Three power modes (high, low and clamp) for peak performance                                    | •       | •       |
| ınce              | High resolution 3.5" TFT LCD color display  | •       | •       |
| dva               | Hot Stick attachment adapter  | •       | •       |
| 4                 | Signal Booster Li-lon Rechargeable 7.2V Battery Pack  |         | •       |
|                   | Signal clamp attachment   |         | •       |

| KIT CONTAI | NS   | AT-7020    | AT-7030    |
|------------|--|------------|------------|
| AT-7000-R  | Receiver unit with Smart Sensor, Tip Sensor and color TFT LCD display  | •          | •          |
| AT-7000-T  | Transmitter with two transmission frequencies (6 kHz and 33 kHz) and three power modes (high, low, clamp)                              | •          | •          |
| TL-7000    | Test Lead Set with alligator clips (Black & Red), 30 ft. grounding lead, power cord, plug adaptors and light socket adapter            | •          | •          |
| CC-7000    | Custom Amprobe hard carrying case that securely holds transmitter, receiver, signal clamp, test leads and accessories                  | •          | •          |
| SC-7000    | Signal Clamp accessory for inducing a signal into wires without access to bare conductors  | (optional) | •          |
| HS-1       | Three-way magnetic hanger for AT-7000-T transmitter, allowing for convenient hanging of unit, placement on belt or as a stand          | (optional) | •          |
| BR-7000-T  | Signal Booster Rechargeable Battery Pack (LI-ION, 7.2 V, 2.2 Ah), provides increased signal transmission power in High and Clamp modes | (optional) | •          |
| BR-7000C   | External battery charger for BR-7000-T   | (optional) | (optional) |

**INCLUDED ACCESSORIES:** Refer to the "Kit Contains" table above.













#### **AT-4000-A Series Advanced Wire Tracer**

Amprobe invented wire tracer technology decades ago and continues to set the standard today. The most advanced of all wire tracers, the AT-4000-A Series combines the technology, features and functions to make wire tracing fast and precise.

- One universal transmitter automatically switches to trace energized and non-energized (open, broken) wires
- Receiver is not position-sensitive - get accurate readings without rotating
- Locates breakers, neutrals, and ground lines
- Locates and traces wires in walls, floors, conduit, and computer cables
- Pinpoints shorts, ground faults and broken wires

- Performs tests without having to interrupt power
- Does not interfere with sensitive electronic equipment
- Precise sensitivity adjustment
- Battery booster strengthens signal for open tracing
- Clamp-on attachment injects signal for non-contact operation



| FEATURES   |                   | RAI                     | NGE                  |                    |
|--|-------------------|-------------------------|----------------------|--------------------|
| Transmitter operating voltage  | 9 V - 300 V AC/DC |                         |                      |                    |
| Operating frequency  |                   | 32.78                   | 36 kHz               |                    |
| Receiver short mode range and open mode range  | 20' (6 m          | n) in air from the trac | ed wire under test c | onditions          |
|  | AT-4001-A         | AT-4003-A               | AT-4004-A            | AT-4005-A          |
| Traces energized and de-<br>energized wires  | •                 | •                       | •                    | •                  |
| Locates energized and de-<br>energized breakers and fuses                            | •                 | •                       | •                    | •                  |
| Finds shorts and opens   | •                 | •                       | •                    | •                  |
| Clamp-on attachment for inducing signal into wires without access to bare conductors | -                 | -                       | •                    | •                  |
| Signal Booster 24V NiCad<br>Rechargeable Battery Pack                                | -                 | -                       | -                    | •                  |
| KIT CONTAINS   | AT-4001-A         | AT-4003-A               | AT-4004-A            | AT-4005-A          |
| Carrying Case  | Soft<br>SV-1000   | Hard<br>CC-AT-4000      | Hard<br>CC-AT-4000   | Hard<br>CC-AT-4000 |
| Receiver R-4000 CON  | •                 | •                       | •                    | •                  |
| Transmitter T-4000   | •                 | •                       | •                    | •                  |
| 110V Pigtail - Banana Plug Cord Set C2901  | •                 | •                       | •                    | •                  |
| Alligator Clip - Banana Plug Cord Set<br>C2902                                       | •                 | •                       | •                    | •                  |
| Grounding Test Lead 25' (7.6 m) MTL-G  | •                 | •                       | •                    | •                  |
| Alligator Clip for Ground Lead VRC-320   | •                 | •                       | •                    | •                  |
| Clamp-on Transmitter Accessory A2202   | -                 | -                       | •                    | •                  |
| Rechargeable Battery Pack B2024  | -                 | _                       | -                    | •                  |
| Battery Pack Recharger B2025   | -                 | -                       | -                    | •                  |
| User manual  | •                 | •                       | •                    | •                  |

Recommended Accessories

A2202 Clamp-on
Transmitter
Accessory

B2024 Rechargeable
battery Pack
Recharger

**INCLUDED ACCESSORIES:** Refer to the "Kit Contains" table above.





AT-2005-A



AT-2004-A

#### **AT-2000-A Series Wire Tracers**

Without interrupting power, you can trace live wires buried or hidden behind walls up to 13' (4 m) deep.

- Traces de-energized and open (broken) wires
- · Locates breakers, neutral and ground lines
- Locates and traces wires in walls, floors, conduit, computer cables, etc.
- Pinpoints shorts, ground faults and broken wires
- Does not interfere with sensitive electronic equipment

| FEATURES   | AT-2004-A | AT-2005-A |
|--|-----------|-----------|
| Traces energized and de-energized wires  | •         | •         |
| Locates energized and de-energized breakers and fuses                                | •         | •         |
| Finds shorts and opens   | •         | •         |
| Clamp-on attachment for inducing signal into wires without access to bare conductors | •         | •         |
| Signal Booster 24V NiCad Rechargeable Battery Pack                                   | _         | •         |

| KIT CONTAINS:                                 | AT-2004-A | AT-2005-A |
|---|-----------|-----------|
| R-2000 Receiver                               | •         | •         |
| S2600-A Transmitter 9-300 V                   | •         | •         |
| T2200 Transmitter for open tracing            | •         | •         |
| Clamp-on Transmitter Accessory A2201CE        | •         | •         |
| B2024 Rechargeable Battery Pack               | -         | •         |
| B2025 Battery Pack Recharger                  | -         | •         |
| C2901 Cordset 110 Volt Plug to Banana Plugs   | •         | •         |
| C2902 Cordset Alligator Clips to Banana Plugs | •         | •         |
| User manual                                   | •         | •         |

**INCLUDED ACCESSORIES:** Refer to the "Kit Contains" table above.



CT-326-C

#### **CT-326-C Current Tracer**

For tough industrial applications, we recommend these heavy-duty current instruments to trace live wires buried underground or hidden behind walls up to 4' (1.2 m) deep.

- Performs tests without having to interrupt power
- Locates breakers, neutral and ground lines
- Locates and traces wires in walls, floors, conduit, computer cables, etc.
- · Pinpoints shorts and ground faults
- Does not interfere with sensitive electronic equipment

| FEATURES   | CT-326-C                       |
|--|--------------------------------|
| Traces energized wires and locates breakers without interrupting power                         | 9 V → 300 V AC/DC              |
| Traces non-energized wires (continuity and grounded wire) and pinpoints shorts & ground faults | Transmitter &<br>9 V batteries |
| Digital filter to assure accuracy in noisy industrial environments                             | •                              |
| Sensitivity settings   | 12                             |

**INCLUDED ACCESSORIES:** User manual, transmitter, receiver, connection cables, carrying case

#### **BT-250 Circuit Breaker Tester**

Identify circuit breakers quickly and efficiently, count on this durable and dependable tracer. Designed for use in residential and light commercial environments.

- Works on all electrical systems from 90 to 250 V AC
- Meets the latest code requirement
- Automatic sensitivity adjustment
- Extremely accurate reading always finds the right breaker

| FEATURES        | BT-250        |
|-----------------|---------------|
| Voltage Range   | 90 V → 250 V  |
| Frequency Range | 40 Hz → 70 Hz |

**INCLUDED ACCESSORIES:** User manual, transmitter, receiver, carrying case, connection cable, light fixture adapter, batteries (installed)

















#### **INSP-3 Wiring Inspector**

Verify in seconds whether a building's wiring complies with electrical code. Save time and money by testing more efficiently and identifying issues crucial to the safety and performance of an electrical system.

- Large display shows all relevant test data, no scrolling or switching screens needed
- Find faulty wiring that needs repair without removing outlet cover plates or panel covers, including:
  - Faulty splices and connections
  - Incorrect wiring
  - Undersized wiring
  - Faulty or incorrectly wired AFCIs/GFCIs
  - Incorrect line voltage
  - Poor ground quality

- Verify performance of electrical systems with user selectable 10, 15 and 20 amp loads
- Flashing screen clearly indicates incorrect wiring or voltage drop test failure
- Test without tripping circuit breakers or blowing fuses
- Check grounding for safety and ability to support sensitive electronic equipment

| FEATURES          | INSP-3  | BEST ACCURACY  |
|-------------------|---|----------------|
| Load              | Constant 10, 15 or 20 amp simulation regardless of line voltage | -              |
| Operating Voltage | 95 V AC → 140 V AC  | +/- 2% + 2 LSD |
| GFI Trip          | 6.0 mA nominal to trip GFI, 30 mA to trip RCD                   | -              |
| AFCI Trip         | Up to 8, 120 AMP pulses within 1/2 second period                | -              |

**INCLUDED ACCESSORIES:** Power cord, 9 V alkaline battery (installed), user manual, carrying case











ST-101B

#### ST-101B / ST-102B Socket Testers

Easily check and confirm proper wiring of electrical receptacles with the Amprobe ST-101B and ST-102B Receptacle Testers. Quickly test sockets and confirm wiring and operation of AC outlets with the ST-101B and confirm that GFCI breakers are properly wired for protection with the ST-102B.

- Confirm proper wiring and operation of AC socket
- Easy-to-read lights indicate common wiring problems
- The trip test to confirm that GFCI protection is working properly (ST-102B only)
- For use on 110-125 V AC

| FEATURES   | ST-101B       | ST-102B       |
|------------|---------------|---------------|
| AC Voltage | 110 V → 125 V | 110 V → 125 V |
| GFCI       | -             | •             |



ST-102B





INCLUDED ACCESSORIES:

Instruction sheet



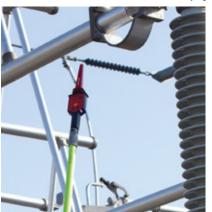
#### **TIC 300 PRO High Voltage Detector**

Rugged and reliable for utility, industrial, heavy manufacturing and mine safety applications, the Amprobe TIC 300 PRO with VolTect™ detects voltages in low, medium and high voltage applications with bright visual and loud audible alerts.

- Utility tool for checking transmission lines, power distribution equipment, down power lines, fuses, and load break connectors
- Lower voltage setting for checking voltage presence in breaker panels, breakers, power outlets and wiring
- Verifies presence of voltage from 30 V AC to 122,000 V AC (122 kV)
- MSHA certified and intrinsically safe
- Push button functionality for ease of use with PPE gloves
- Visual and audible voltage indication
- Self-test verifies tester works properly
- Ergonomic design with a convenient handle
- Drop-proof to 6' (1.8 m)

| FEATURES                                  | TIC 300 PRO   | TIC 410A     |
|---|---|--------------|
| VolTect™ Non-Contact<br>Voltage Detection | 30 V AC → 1500 V AC<br>1500 V AC → 122,000 V AC (with Hot Stick TIC 410A) | -            |
| 48" length                                | -   | •            |
| Voltage                                   |   | Up to 121 kV |

INCLUDED ACCESSORIES: CC-300 PRO carrying case, user manual, batteries (installed)







#### **MO-100 Milliohm Meter**

Spot potential failures fast with the portable, battery powered MO-100. Check for opens or shorts in motor windings, generators and transformers. Test heating elements and wire-to-wire resistance in critical electrical connections.

- Accurate four terminal measurement down to 100 μΩ without test leads resistance compensation
- Three test currents with over-temperature protection for measurement precision
- Protection against inadvertent connection to overvoltage
- Potential lead resistance, current lead resistance checks
- Indicates measurement errors due to temperature or connection problems
- Auto-hold and auto-off features
- Lightweight, robust and compact
- "O-Ring" sealed enclosure

| FEATURES         | MO-100   |  |
|------------------|--|--|
| Measuring Ranges | 0 → 200.0 mΩ in steps of 100 μΩ<br>0 → 2000 mΩ in steps of 1 mΩ<br>0 → 20.00 Ω in steps of 10 mΩ<br>0 → 200.0 Ω in steps of 100 mΩ<br>0 → 2000 Ω in steps of 1 Ω |  |
| Test Current     | 1 mA (2000 $\Omega$ range) 10 mA (20 $\Omega$ / 200 $\Omega$ ranges) 100 mA (200 m $\Omega$ / 2000 m $\Omega$ ranges)  |  |

**INCLUDED ACCESSORIES:** User manual, test leads, batteries (installed)



For detailed specifications go to **amprobe.com** 



9.8" (L) x 7.5" (W) x 4.3" (D) (250 mm x 190 mm x 110 mm)

CEA







GSD600



**RLD-1 SENSOR** Replacement Sensor (Replacement part)

**Recommended Accessories** 

#### \*\*\*\* TOP RATED

#### "Best tool for the job!"

In over 25 years of business, I've seen units with suspected refrigerant leaks but were too small to find. With the Amprobe RLD-1 refrigerant leak detector I can take the guess work out of finding and repairing a refrigerant leak. I recommend that if you are in the HVAC business this is a must have for every tool bag!"

- RLD-1 Customer reviews

#### **GSD600 Gas Leak Detector**

Detect dangerous methane or propane leaks that can lead to explosions and gas poisoning. With its five-level LED and audible alarms, the GSD600 helps you assess whether the area is safe or needs to be vented. The frequency of the beeping increases with the concentration of the gas, allowing you to pinpoint the source of the leak in piping or appliances. The display provides an accurate measurement of the presence of gas in the area.

- · Detects combustible gases
- Quickly identifies and pinpoints gas leaks for closed piping systems
- · Automatic calibration feature level LED alarm: >40, >80, >160, >320, and >640 ppm
- · Mute function and LED alerts for guiet areas
- Built-in earphone jack (earphones not included) for loud environments
- Flexible probe to access difficult measurement areas
- Auto power-off

| FEATURES    | RANGE            |  |
|-------------|------------------|--|
| Methane     | 40 ppm → 640 ppm |  |
| Propane     | 35 ppm → 580 ppm |  |
| Sensitivity | 35 ppm (propane) |  |

INCLUDED ACCESSORIES: Battery (installed), carrying case, user manual





#### \*\*\*\* TOP RATED

#### "This thing really works."

"The Amprobe GSD600 found a leak at the furnace shut-off valve, I tightened nut and that was fixed."

- GSD600 customer reviews

#### **RLD-1 Refrigerant Leak Detector**

Troubleshoot air conditioning systems quickly and accurately with the RLD-1. State-of-the-art technology makes it easy to precisely pinpoint a wide variety of halogenated refrigerant leaks.

- Detects R-134a, R-404a, R-407c, R-410a, R-22, Freon and other refrigerants
- Sensitive gas sensor and advanced digital signal processing for high accuracy
- Built-in suction pump for precise sensor response
- Tri-color LED display and audio clearly indicate leaks
- High-Medium-Low (H/M/L) leak sensitivity selector
- Automatic zero and background compensation
- Low battery indication
- Ambient concentration reset

| FEATURES                       | RLD-1                                       |  |
|--------------------------------|---|--|
| Detectable Gases               | R-134a, R-404a, R-407c, R-410a, R-22, Freon |  |
| R-22, 134a Sensitivity         | H - 3g/year, M - 15g/year, L - 30g/year     |  |
| R-404a, 407c, 410a Sensitivity | H - 4g/year, M - 20g/year, L - 40g/year     |  |
| Alarm Method                   | Buzzer, Tricolor LED bar Indicator          |  |
| Power Usage                    | 2 C size (3V DC) Alkaline Batteries         |  |
| Snake Tube Length              | 15.5" (40 cm)                               |  |

INCLUDED ACCESSORIES: Batteries (installed), user manual, carrying case, leak check bottle, AC adapter







#### TX900 Microwave Leak Detector

For domestic and commercial appliance engineers who service microwave ovens, the TX900 verifies if the oven operates in accordance with current standards and regulations.

- Measures for wave leakage and tests oven power
- 8 dipole sensors to detect plane wave signals of any polarization
- Temperature compensation for accurate readings regardless of ambient temperature changes
- Analog bar graph
- Compact, ergonomic design
- Low battery indicator
- Auto-zero

| FEATURES                    | ТХ900                                       |  |
|-----------------------------|---|--|
| RF Power Sensing Range      | 0 mW/cm <sup>2</sup> →10 mW/cm <sup>2</sup> |  |
| Nominal Detecting Frequency | 2.45 GHz                                    |  |
| Resolution                  | 0.1 mW/cm2                                  |  |
| Step Input Response         | < 1 sec                                     |  |

INCLUDED ACCESSORIES: 2 x 500 ml plastic beakers, spirit (alcohol) glass thermometer, battery), carrying case, user manual







TX900

#### **TMULD-300 Ultrasonic Leak Detector with Ultrasonic Transmitter**

When leaking gases are not sufficiently pressurized, use the TMULD-300. It includes an ultrasonic transmitter that creates sound waves so you can check door or trunk seals for air tightness, or windshields for water tightness.

- · Detects the ultrasonic noise created by pressure or vacuum leaks of any gas, regardless of type: CFC's, HFC's, Nitrogen, CO2, Steam, etc.
- · Unaffected by contaminants, or windy conditions
- Identifies failing solenoids, valves and bearings
- Audible & Visual Leak Indicators



TMULD-300

**INCLUDED ACCESSORIES**: Flexible tubing adapter, tubular extension, carrying case, power parabola, headphone, batteries (installed), UT-300 transmitter, user manual





#### "Great product."

"This tool paid for itself many times over. I have found leaks large and small inside walls, on evaporator coils, condensers and water lines. I've loaned it to colleagues who purchased your product immediately after using mine. These tools lead the industry in leak detection through its sensitivity and ability to detect negative or positive pressure."

- TMULD-300, customer reviews

#### **Recommended Accessories**

UT-300 Ultrasonic Transmitter (ULD-300) (Replacement part)

ULD-300-KIT1 Adapter Kit For ULD-300: **TEA-1 Flexible** tubing adapter PB-1 power parabola HP-1 headphone TE-1 tubular extension

(Replacement part)







LM-100

LM-200LED

#### LM-100 and LM-120 Light Meters

These portable, easy-to-use digital light meters measure interior illumination levels from fluorescent, metal halide, high-pressure sodium or incandescent sources. Switch off, reduce or increase the output level of lighting fixtures. Reduce the energy burden of the building by significantly increasing the efficiency of its lighting system.

- Measure in lux or footcandles, front panel switchable
- Simple, one-handed operation
- Silicon photodiode sensor and filter for accuracy and high-resolution
- Analog DC voltage output to operate with chart recorder or data logger (LM-120 only)
- Zero adjustment (LM-120 only)
- · Auto power-off to save battery life

| FEATURES               | LM-100                        | LM-120                       | BEST ACCURACY   |
|------------------------|-------------------------------|------------------------------|---|
| Ranging                | Manual                        | Automatic/Manual             |   |
| Illumination<br>Sensor | Silicon photodiode and filter |                              |   |
| Range Lux              | 200, 2000, 20000, 200000      | 20, 200, 2000, 20000, 200000 | +/-3% (Calibrated to standard incandescent lamp 2856° K |
| Range Footcandles      | 20, 200, 2000, 20000          |                              |   |
| Data                   | Data hold, max                | Data hold, min/max           |   |
| Zero                   | -                             | Yes                          |   |

**INCLUDED ACCESSORIES**: Batteries (installed), carrying case, user manual







This professional tester accurately measures light output of LED sources for all visible light ranges.

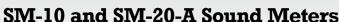
- · Lux or footcandle measurement units, user selectable
- Data hold
- Max recording captures highest light measurement
- Measuring lights source include all visible ranges
- · Accurate measurements with spectral response close to CIE luminous spectral efficiency
- · Angled light cosine correction
- Extendable wire (approximately 5' (1.5 m)
- Measurements according to JISC1609:1993 and CNS 5119 general A class specifications

| FEATURES              | LM-200LED                       | BEST ACCURACY   |  |
|-----------------------|---------------------------------|---|--|
| LED Light Measurement | 200, 2000, 20000, 200000 lux    | +/- 3% (Calibrated to standard<br>incandescent lamp 2856° K) and<br>corrected LED day white-light spectrum. |  |
|                       | 20, 200, 2000, 20000 footcandle |   |  |

INCLUDED ACCESSORIES: User manual, battery (installed), carrying case







These sound meters meet the measurement needs of safety engineers, health, industrial and safety offices as well as quality control. Use them to check compliance with safety regulations and perform acoustic analysis. They use two different weighting filters required by the IEC 651 and ANSI \$1.4 Type 2 for audio filtering.

- A-weighting for general noise sound level
- C-weighting for measuring sound level of acoustic material control in various environments
- Display with 0.1dB steps on a 4-digit LCD
- Slow (1 sec) and fast (125ms) response settings to check peak and average noise levels
- PC interfaces (SM-20-A only)

| FEATURES                              | SM-10  | SM-20-A                          |  |
|---------------------------------------|--|----------------------------------|--|
| Microphone                            | 1/2" Electret condenser microphone                         |                                  |  |
| Standard Applied                      | IEC 651 Type 2,  | IEC 651 Type 2, ANSI S1.4 Type 2 |  |
| Dynamic Range                         | 50 dB  |                                  |  |
| Time Weighting                        | FAST (125 mS), SLOW (1 sec)                                |                                  |  |
| Frequency Range                       | 31.5 Hz → 8 kHz  |                                  |  |
| Measuring Level<br>Range (Auto Range) | A-Weighting: 30 dB → 130 dB<br>C-Weighting: 35 dB → 130 dB |                                  |  |
| Data                                  | Data hold  | Min/max                          |  |
| Internal Memory                       | -  | 14000 records                    |  |

INCLUDED ACCESSORIES: Carrying case, user manual, battery (installed), USB cable download and software CD (SM-20-A only)







SM-20-A

#### **SM-CAL1 Sound Meter Calibrator**

This instrument generates the fixed sound level signals needed to calibrate sound level meters.

- Two output levels: 94 dB and 114 dB
- Output frequency: 1000Hz
- Fits 0.5" microphones
- Easy one-handed operation

**INCLUDED ACCESSORIES**: Battery (installed), user manual

- Low battery indicator
- CE: conforms to ANSI S1.40 1984 and IEC942 – 1988 Class 2





SM-CAL1

#### **MT-10 Moisture Meter**

Measure the moisture content of wallboard, wood, mortar, plaster or other building materials to identify areas of water damage or harmful mold growth. Check wood or concrete flooring before installation, wood during drying or before woodworking.

- Three-color LED indicates moisture severity
- Backlight makes display visible in dim areas

**INCLUDED ACCESSORIES:** User manual, battery







MT-10









#### TMA5 Mini Vane Anemometer

This pocket-sized tool gives you an easy way to measure air flow, temperature and humidity in the HVAC systems of residential, commercial or industrial buildings.

- Measures air velocity, temperature and ambient temperature (in °F or °C), humidity, dew point, wet bulb, wind chill
- · Simple, two-button operation
- Selectable wind units: mph, ft/m, Knt, m/s, km/h, BF
- · Maximum wind speed display
- Data hold
- Auto power-off with disable feature
- Low battery indication
- · Ergonomic design with wrist strap
- External temperature probe included

| FEATURES                   | TMA5   |  |
|----------------------------|--|--|
| Wind Speed Range           | 0.5 → 44.7 mph, 60 → 3937 ft/m, 0.4 → 38.8 knt,<br>1.1 → 20.0 m/s, 0.7 → 72.0 km/h, 1 → 8 BF |  |
| Air Temperature Range      | 32°F → 122°F (0°C → 50°C)  |  |
| External Temperature Range | -4°F → 158°F (-20°C → 70°C)  |  |
| Air RH% Range              | 5% → 95% RH  |  |
| Wind Speed Response        | averaging every 2 seconds  |  |
| Temperature Response Time  | 60 seconds (typical)   |  |
| Air RH% Response Time      | 60 seconds (typical)   |  |
| Wind-Chill Display         | •  |  |
| Dew Point Temperature      | •  |  |
| Wet Bulb Temperature       | •  |  |

**INCLUDED ACCESSORIES:** Battery (installed), user manual, external temperature probe, ergonomic wrist strap





#### **TMA-21HW Hot Wire Anemometer**

Hot wire anemometer technology eliminates bearings and rotating parts to make these meters durable and measurements stable and accurate. It's the simple, safe way to monitor indoor air quality and measure air flow and temperature in residential, commercial and industrial air conditioning systems.

- 4' (1.2m) telescopic wand no ladder needed for most commercial applications
- · Measures air flow volume in CFM, CMM
- Instant average, 2/3 Vmax flow measurements
- Velocity m/s, ft/min, knots, km/hr, mph
- Relative humidity and temperature measurement
- · Data hold, min/max with time stamp
- Data memory and real-time function (99 sets)
- 512KB auto data-logging capacity
- USB interface
- · Wet bulb and dew point
- Large backlight LCD display shows five parameters

| FEATURES             | TMA-20HW  | TMA-21HW   | BEST ACCURACY          |
|----------------------|---|------------|------------------------|
| Air Flow             | 0.10 m/s → 30.00 m/s<br>0.2 km/hr → 110.0 km/hr<br>10 ft/min → 6000 ft/min<br>0.10 knots → 59.0 knots<br>0.12 MPH → 68.00 MPH |            | +/- 3% of rdg +/-1% FS |
| Air Flow Volume      | 0.000 CFM → 999900 CFM<br>0.000 CMM → 999900 CMM  |            | +/- 3%                 |
| Temperature          | 4°F → 140°F<br>(-20°C → 60°C)   |            | +/- 0.9°F (+/- 0.5°C)  |
| Relative Humidity    | -   | 0.0 → 100% | +/- 3%                 |
| Data-logging via USB | -   |            | -                      |
| Wet Bulb / Dew Point | -   | •          | -                      |

INCLUDED ACCESSORIES: Batteries (installed), hard carrying case, user manual, USB cable and PC software



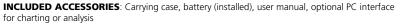


#### **TMA40-A Anemometer, Relative Humidity** and Temperature

With one tool, you can measure air velocity (FPM) or air volume (CFM), relative humidity, and temperature. Large digital display with backlight and flexible measurement vane makes measuring easier in difficult areas. Measures up to 99 points and logs up to 2400 measurements.

- Flexible measurement vane for accessing difficult areas
- Measures air velocity (fpm), air volume (cfm), relative humidity, and temperature
- Measure up to 99 points
- Data logging up to 2400 data points
- Optional PC interface for charting or analysis
- · Large digital display with backlight

| FEATURES          | RANGE                           | RESOLUTION         | ACCURACY             |
|-------------------|---------------------------------|--------------------|----------------------|
| Air Velocity      | 0.4 to 32 m/s (1.3 to 105 ft/s) | 0.1 m/s (0.1 ft/s) | +/- 3%               |
| Air Volume        | 0 → 99999 (cfm/cmm)             | 0.1 CMM - 1 CFM    | +/- 3%               |
| Temperature       | -4°F → 158°F (-20°C → 70°C)     | 0.1°F (0.1°C)      | ± 0.6°C (± 1°F)      |
| Relative Humidity | 0 → 100%                        | 0.1%               | +/- 3% @ 77°F (25°C) |





CEA





#### \*\*\*\* **TOP RATED** "Great tool."

"The Amprobe TMA40-A is a great tool for air flow measurement. It does dew point, wet bulb, dry bulb, air speed, and air velocity. Great tool for troubleshooting duct problems."

- TMA40-A customer reviews



TMA40-A

#### **TMA10A Anemometer with Flexible Precision Vane**

The essential tool for HVAC technicians, the TMA10A measures air velocity or volume (CFM), plus temperature. Just enter surface area type for accurate airflow measurements.

- Large dual display for viewing airflow or velocity measurement including temperature
- Long flexible cord to access remote vanes
- Continuous moving average for up to 2 hours
- · Air velocity average for up to 8 points
- Multi-point air flow (cfm) average
- PC interface for charting or analysis
- . Min/max/average reading on a single point
- Data hold
- · Auto power-off function

| FEATURES                | RANGE                      | BEST ACCURACY        |
|-------------------------|----------------------------|----------------------|
| Air Volositu            | 0.40 → 25.00 m/s           | +/- 2% of full scale |
| Air Velocity            | 125 → 4900 ft/min          | +/- 2% of full scale |
| Ata Flance              | 0.01 → 99.99 m³/sec        | 0 → 9.999 m          |
| Air Flow                | 1 ft → 9999 cfm            | 0 → 9.999 ft         |
| Air Temperature °F (°C) | 32°F → 122°F (0°C to 50°C) | +/- 1.5°F (0.8°C)    |

INCLUDED ACCESSORIES: Carrying case, battery (installed), user manual, optional PC interface for charting or analysis



#### \*\*\*\* TOP RATED

"Does all that is asked of it! It is highly accurate and results are repeatable."

- TMA10A customer review



TMA10A







TR200-A



TR300



#### **TR200-A Temperature and Relative Humidity Data Logger**

One compact unit monitors both temperature and humidity and records it on your PC using the USB interface. Amprobe software included.

- · Record sample interval timing, start/stop, date, time, Hi/Lo alarm threshold, and units
- Visible LED warnings alert you to air quality problems
- · Wall mountable

• IP-65 rating for dust and moisture

**INCLUDED ACCESSORIES:** Batteries (installed), user manual, PC software CD and USB cable

#### **TR300 Temperature and Relative Humidity Data Logger**

Wall-mountable, self-standing, or tripod mountable, this data logger configures to your application.

- · Temperature, relative humidity, dew point or web bulb measurements with real-time date/ hour stamp
- Audible and visual alerts help you monitor IAQ conditions
- Stores up to 16,000 readings
- Records data to a PC with USB cable and Amprobe software included
- Programming on-screen or from the PC

| FEATURES                | TR200-A                        | TR300                          |  |
|-------------------------|--------------------------------|--------------------------------|--|
| Dual Display LCD        | _                              | •                              |  |
| Air Temperature Reading | 14°F → 140°F<br>(-10°C → 60°C) | -4°F → 158°F<br>(-20°C → 70°C) |  |
| Temperature Accuracy    | +/- 1°F (+/- 0.6°C)            | +/- 1°F (+/- 0.6°C)            |  |
| RH Reading              | 0.0 to 99.9%                   | 0 to 100%                      |  |
| RH Accuracy             | +/- 3% at 77°F (25°C)          | +/- 3% from 10 - 90%           |  |
| Recording               | 16000                          | 16000                          |  |
| Dew Point Reading       | -                              | •                              |  |
| On Screen Programmable  | -                              | •                              |  |
| Software Programmable   | •                              | •                              |  |

INCLUDED ACCESSORIES: Batteries (installed), user manual, PC software CD and USB cable





#### **SOLAR-100 Power Meter**

Optimize the placement of solar systems and analyze window efficiency with the SOLAR-100. Measure solar output and calculate overall energy and efficiency.

- · Windows performance testing: calculate and verify heating or heat reduction caused by direct sunlight
- Research the location of solar panels or solar water heaters
- Measures solar power and transmission
- Power mode measures incident solar radiation
- Transmission mode calculates the percentage of solar power transmission through materials such as windows
- · Convenient display with remote sensor technology
- · Selectable measurement units (W/m2 or BTU/ft2xh)
- Min/max function identifies locations with maximum or minimum power
- Also useful for physics and optical laboratories, meteorology, agriculture



| FEATURES    | SOLAR-100                        |  |  |
|-------------|----------------------------------|--|--|
| Solar Power | Up to 2000 W/m², 634 BTU/(ft2xh) |  |  |
| Max/Min     | •                                |  |  |
| Data Hold   | •                                |  |  |

**INCLUDED ACCESSORIES:** Battery (installed), carrying case, user manual





#### **SOLAR-600 Solar Analyzer**

Install, maintain, troubleshoot and evaluate the efficiency of solar panels with this these professional analyzers. The SOLAR-600 also offers real-time data logging and PC downloads for further analysis.

- Determine the proper inverter size and optimum power output position of panels
- Identify broken or worn-out cells
- I-V curve test with cursor for solar cells
- Maximum solar power (Pmax) search by auto-scan
- Maximum voltage (Vmaxp) at Pmax
- · Maximum current (Imaxp) at Pmax
- Voltage at open circuit (Vopen)
- Current at short circuit (Ishort)
- I-V curve with cursor
- Calculation of panel efficiency (%)
- Manual single point test
- · Real time datalogging and PC download

| FEATURES              | SOLAR-600                            |  |
|-----------------------|--------------------------------------|--|
| DC Voltage:           | 0.000 V → 9.999 V, 10.00 V → 60.00 V |  |
| DC Current:           | 0.01A → 9.99 A, 10.0 A → 12.0 A      |  |
| DC Current Simulation | 0.01 A → 9.99 A, 10 A → 12 A         |  |
| Power                 | 0 W → 720 W                          |  |
| Efficiency            | •                                    |  |
| Scan delay            | 0 mS → 3000 mS                       |  |
| Alarm                 | •                                    |  |
| Solar Panel Area      | 0.001 m2 → 9999 m2                   |  |
| Standard Light Source | 10 W/m2 → 1000 W/m2                  |  |
| Data Storage Memory   | 99 records                           |  |
| Data Logging          | •                                    |  |

**INCLUDED ACCESSORIES:** User manual, rechargeable battery pack (installed), AC adapter, USB cable and software CD, test leads, carrying case







#### \*\*\*\* TOP RATED

#### "A great instrument."

"This is an excellent device for quick measurements of irradiance out in the field. I was surprised that it can measure BTUs as well as headlight brightness and window tint.

It can also demonstrate the advantages of tracking and the effects of cloud cover. Great value for the money."

- SOLAR-100 customer reviews



SOLAR-600











When you need low-voltage control circuits for safe operation in industrial and process control environments, choose these low-voltage relays with built-in transformers. Each unit operates independently, so you can install one relay and operate it with as many switches as needed or control multiple relays with a single switch.

- Uses light 22 gauge wire, saving the time and expense of pulling Romex or armored cable
- Simplifies wiring no need to wire back to separate low voltage transformers
- Operates silently so you can install relays at the fixture instead of at a remote location

| FEATURES                        | R-115S                                       | RC-1205 |
|---------------------------------|--|---------|
| AC Voltage                      | 105 V → 125 V                                |         |
| AC Current                      | Up to 6.5 A (1/4 HP max motor load at 120 V) |         |
| Frequency                       | equency 60 Hz                                |         |
| Safe Control Switching, Maximum | 10 V DC 10 milliamps                         |         |







ELS2A

#### **ELS2A AC Line Splitter**

Measure the current on a 2-wire or 3-wire power cord up to 15 A without having to cut off the plug and separate the conductors, or open electrical boxes on 120 V lines. Use with any Amprobe clamp meter.

- Two measurement loops, 1X and 10X for increased sensitivity
- Built-in voltage measurement jacks to check for voltage sags and surges
- Rated for 120 V, 15 Amps

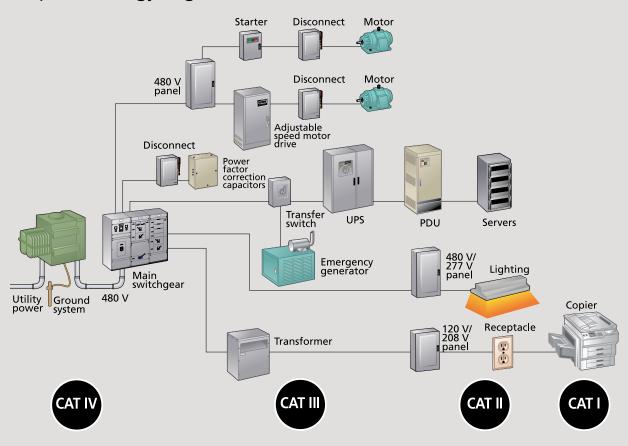


#### **Safety Reference Guide**

#### International safety standards

Test equipment must be designed to protect people who work in the high-voltage, high-current environments. In order to prevent injury, the International Electrotechnical Commission (IEC) develops international general standards for safety of electrical equipment for measurement, control and laboratory use. The most current standard 61010 specifies overvoltage categories for electrical distribution systems. The category rating increases based on the closeness to the power source and a higher level of user protection that is required from test equipment.

#### **Proposed Energy Regions\***



#### **CAT IV**

Three-phase at utility connection, electricity meters, outside and service entrance

#### CAT III

Three-phase distribution, large building lighting systems, distribution panel devices

#### CAT II

Appliances, portable tools

#### CAT I

Electronics, signal level single-phase receptacle loads

<sup>\*</sup> Category ratings per IEC 61010-1 Category boundaries may not be exact



# 2017-2018 Focus Products Catalog



### **Tested By The Best**

#### **Amprobe**<sup>©</sup>

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