ARDENT Meters and Testers

Multimeters and Clamp Meters

Overview

From electrical diagnostics to industrial testing, high-quality meters are indispensable tools for professionals managing voltage, current, resistance, power analysis, and insulation. ARDENT instruments are meticulously engineered for accuracy, reliability, and intuitive operation, providing the critical data essential for comprehensive troubleshooting, predictive maintenance, and performance optimization across diverse operational environments. Integrated advanced safety features, such as the Automatic Terminal Blocking system (designed to prevent inadvertent misuse), and ergonomic enhancements like the rotating head of clamp meters, ensure ARDENT meters deliver seamless operation for both routine verification and complex diagnostics. Engineered for durability and efficiency, these instruments offer the precision and confidence required to execute demanding measurement tasks effortlessly.

ARD-MM410

ARD-IT30

ARD-CM300AC

ARD-CM1000ACDC

Safety Category Ratings		
Category Rating	***Brief Description***	***Typical Applications***
CAT IV	Connection point to utility power and outdoor conductors	• Electricity meters, primary overcurrent protection equipment • Outside and service entrance, service drop from pole to building, run between meter and panel • Overhead line to detached building, underground line to well pump
CAT III	Three-phase circuits and single-phase lighting circuits in commercial buildings	• Equipment in fixed installations, such as switchgear and polyphase motors • Bus and feeder in industrial plants • Feeders and short branch circuits, distribution panel devices • Lighting systems in larger buildings • Appliance outlets with short connections to service entrance
CAT II	Single-phase receptacles and connected loads	• Appliance, portable tools, and other household and similar loads • Outlet and long branch circuits • Outlets at more than 10 meters (30 feet) from CAT III source • Outlets at more than 20 meters (60 feet) from CAT IV source
CAT I	Electronics	• Protected electronic equipment • Equipment connected to (source) circuits in which measures are taken to limit transient overvoltages to an appropriately low level

Want to learn more about Safety Category Ratings?

Click here to read our safety guide and FAQ's.

The measurement category (CAT) rating and voltage rating for a meter is determined by a combination of the meter, test probes and any accessories connected to the meter. The combination rating is the LOWEST rating of any individual component.
Always de-energize power before accessing an electrical enclosure.
Always follow safety and lockout/tagout procedures when working on or near electrical systems and equipment.
Use proper personal protective equipment (PPE) when working around sources of hazardous electrical energy.

ARDENT Meters and Testers

Replacement Holster

Keep your multimeter secure and protected with this durable rubber holster, designed to withstand everyday use in demanding environments. Engineered for a snug fit, it provides enhanced grip, shock absorption, and an added layer of defense against impacts, ensuring your device stays safeguarded while in the field or workshop.

Canvas Carrying Cases

Built for convenience and durability, these rugged polyester canvas carrying cases offer reliable storage and protection for your multimeters and clamp meters. Featuring reinforced stitching, multiple compartments, and a secure closure, they keep your instruments organized while shielding them from dust, debris, and on-the-go wear and tear. Whether transporting tools between worksites or storing them safely, these cases deliver practical protection without compromise.

ARD-MM-BT-1

ARD-MM-CASE-1

Holster and Cases Specifications

Part Number	Part Image	Description	For Use With	Price
ARD-CM-CASE-1		ARDENT carrying case, polyester canvas, 10.50 x 3.50 x 3.50in, 3 compartments.	ARDENT clamp meters	$21.50
ARD-MM-CASE-1		ARDENT carrying case, polyester canvas, 9.50 x 4.50 x 4.50in, 2 compartments.	ARDENT multimeters and insulation tester	$21.50
ARD-MM-BT-1		ARDENT rubber holster, replacement	ARD-MM410, ARD-MM612, ARD-MM613, ARD-MM615 and ARD-MM616	$10.50

ARDENT Meters and Testers

Meter Accessories

Ensure peak performance and versatility with essential accessories designed to enhance your multimeter and clamp meter functionality. From replacement test leads and alligator clips for secure connections to fuses and temperature adapters for expanded measurement capabilities, these tools provide the precision, durability, and reliability needed to keep you on the job without interruption.

ARD-PRB-STD

Meter Accessories Specifications

Part Number	Product Image	Description	Includes	For Use With	Price
ARD-PRB-FPT		ARDENT test lead set, replacement, CAT IV 600V/ CAT III 1000V, 48in length. For use with all ARDENT multimeters and clamp meters. Fine tip CATIV 600V probe covers included.	Fine tip cativ 600v probe covers	all ARDENT multimeters and clamp meters	$21.50
ARD-PRB-STD		ARDENT test lead set, replacement, CAT IV 600V/ CAT III 1000V, 48in length. For use with all ARDENT multimeters and clamp meters. Standard tip CATIV 600V probe covers included.	Standard tip cativ 600v probe covers	all ARDENT multimeters and clamp meters	$21.50
ARD-AG-CLP-1		ARDENT alligator clip set, CAT IV 600V/CAT III 1000V. For use with ARD-PRB-STD.	N/A	ARD-PRB-STD	$21.50
ARD-TPA1		ARDENT temperature adapter, for use with ARD-MM410, ARD-MM612, ARD-MM613, ARD-MM615, ARD-MM616 and ARD-IT30.	N/A	ARD-MM410, ARD-MM612, ARD-MM613, ARD-MM615, ARD-MM616 and ARD-IT30	$8.25
ARD-FS16A		ARDENT fuse, replacement, 16A. For use with ARD-MM410, ARD-MM612, ARD-MM613, ARD-MM615 and ARD-MM616.	N/A	ARD-MM410, ARD-MM612, ARD-MM613, ARD-MM615 and ARD-MM616	$16.50
ARD-FS1P6A		ARDENT fuse, replacement, 1.6A. For use with ARD-MM410, ARD-MM612, ARD-MM613, ARD-MM615, ARD-MM616 and ARD-IT30.	N/A	ARD-MM410, ARD-MM612, ARD-MM613, ARD-MM615, ARD-MM616 and ARD-IT30	$16.50

Understanding Safety Category (CAT) Ratings

Why Your Test Instrument Keeps You Safe

When you're working with electricity, safety is the number one priority. You shouldn't use the wrong electrical test instrument for a high-energy circuit. That's where Safety Category (CAT) Ratings come in.

Think of CAT ratings as a safety roadmap for your test instrument, telling you where it's safe to use it. These ratings are determined by international standards (like IEC 61010) and indicate how well a meter can withstand sudden, powerful surges of electricity—called "transients" or "voltage spikes"—that can occur from things like lightning strikes, motor starts, or even just turning equipment on and off.

Safety Category Ratings

Category Rating	*Brief Description*	*Typical Applications*
CAT IV	Connection point to utility power and outdoor conductors	• Electricity meters, primary overcurrent protection equipment • Outside and service entrance, service drop from pole to building, run between meter and panel • Overhead line to detached building, underground line to well pump
CAT III	Three-phase circuits and single-phase lighting circuits in commercial buildings	• Equipment in fixed installations, such as switchgear and polyphase motors • Bus and feeder in industrial plants • Feeders and short branch circuits, distribution panel devices • Lighting systems in larger buildings • Appliance outlets with short connections to service entrance
CAT II	Single-phase receptacles and connected loads	• Appliance, portable tools, and other household and similar loads • Outlet and long branch circuits • Outlets at more than 10 meters (30 feet) from CAT III source • Outlets at more than 20 meters (60 feet) from CAT IV source
CAT I	Electronics	• Protected electronic equipment • Equipment connected to (source) circuits in which measures are taken to limit transient overvoltages to an appropriately low level

CAT Ratings Explained

The higher the CAT number, the tougher the environment the instrument is designed for, and the more protection it offers you. Here's a simple way to look at them:

CAT I (Lowest Energy): This is for measuring low-energy circuits, like everyday electronics, small appliances, or control signals. Think of it as being far away from the main power source, where potential surges are very small.

CAT II (Local Power Outlets): This category is for measurements on standard wall outlets and plug-in loads. This includes most household appliances, portable tools, and devices you plug into a wall socket. The potential for sudden surges is higher than CAT I, but still relatively contained.

CAT III (Building Electrical Installations): This is for measurements within a building's main electrical system. This includes things like circuit breakers, wiring, switches, distribution panels, and industrial equipment directly wired into the building. Here, the potential for dangerous surges is significantly higher than in CAT II.

CAT IV (Utility & Service Entrance): This is the highest and most robust category. It is for measurements at the very source of the low-voltage power installation – essentially, where the power comes into a building from the utility lines. This includes outdoor power lines, electricity meters, service entrances, and underground utility vaults. These environments have the highest potential for extremely dangerous and powerful surges.

Why Does This Matter to You?

Using a meter with the correct (or higher) CAT rating for your specific task is crucial. If you use a meter rated too low for the environment you're working in, a sudden voltage spike could not only damage your meter but, more importantly, could cause it to fail explosively, leading to serious injury or even death from arc flash or electrocution.

Always check the CAT rating on your test instrument and make sure it matches or exceeds the requirements of the electrical environment you're working in. When in doubt, always choose a higher CAT rating – it offers more protection!

Understanding Safety Category (CAT) Ratings

Essential Electrical Safety Practices: Your Questions Answered

Safety is paramount when performing electrical measurements. Here are answers to common questions about protecting yourself and using proper equipment:

Q: How is the overall safety rating of my electrical test setup determined?

A: The safety of your electrical measurement setup, including its Measurement Category (CAT) rating and voltage rating, is determined by the combination of every component you use. This includes the test meter itself, the test probes (leads), and any accessories connected to the meter (e.g., alligator clips, specialized adapters).

The critical rule is that the overall combination rating is the LOWEST rating of any individual component in your setup. For example, if you have a meter that has a CAT IV rating but are using CAT III test leads, your entire setup is only safe to the CAT III rating of those leads. Always ensure all parts of your measurement system are rated appropriately for the task.

Q: What fundamental safety steps should I always take before working on electrical systems?

A: Several foundational safety practices are non-negotiable when working with or near electrical energy:

- Always de-energize power before accessing an electrical enclosure or beginning work on electrical equipment, whenever possible.
- Always meticulously follow safety and lockout/tagout (LOTO) procedures when working on or near electrical systems and equipment. This prevents unexpected energization.
- Utilize proper personal protective equipment (PPE), such as arc-rated clothing, insulating gloves, and eye protection, when working around sources of hazardous electrical energy.
  - A hazard assessment will determine the specific PPE required.