










Meters designed for the way you work

	ADVANCED METERS		GENERAL PURPOSE		COMPACT METERS			SPECIALTY METERS	
									
	289	87V	3000 FC	179	117	116	115	28 II	1587 FC
Best for	Advanced industrial troubleshooting, including data logging and graphing intermittent problems	Industrial troubleshooting	Commercial and industrial electrical/electronic troubleshooting and maintenance	Everyday use for industrial and electrical troubleshooting and maintenance	Wide variety of electrical work	HVAC troubleshooting	Electronic and field service applications	Harsh environments requiring dustproof and waterproof test equipment	Advanced troubleshooting and preventive maintenance with high performance 2-in-1 insulation DMM
Applications	<p>Working on VSDs/VFDs: Take accurate voltage, current and frequency measurements on the output side of the drive at either the drive itself or at the motor terminals.</p> <p>Graphing: View logged values graphically in the field right on the meter, without a PC.</p> <p>Logging: For unattended monitoring of signals over time, to detect intermittent problems.</p> <p>Testing motor windings or contact resistance: Allows testing of resistance up to 50 ohms with one milliohm (0.001 ohm) resolution.</p>	<p>Working on VSDs/VFDs: Take accurate voltage, current and frequency measurements on the output side of the drive at either the drive itself or at the motor terminals.</p> <p>Industrial troubleshooting: All of the resolution and accuracy you need to solve more problems on motor drives, in-plant automation, power distribution, and electromechanical equipment.</p> <p>Checking power quality: Capture glitches and spikes as short as 250 μs. Identify irregular signals.</p>	<p>Work faster and safer with Fluke Connect (FC) wireless test tools: The 3000 FC wireless multimeter and associated wireless modules allows users to work safer, log time stamped readings, be in two places at once and see multiple readings simultaneously to solve complex electrical problems faster.</p> <p>Build the system as your needs grow: Start with the multimeter and expand your measurement and troubleshooting capabilities by adding additional meters to meet your specific applications including three-phase load studies with iFlex or voltage monitoring.</p>	<p>Electrical maintenance and troubleshooting: Variety of commercial electrical troubleshooting, installation and maintenance.</p> <p>Temperature measurements: Built-in thermometer conveniently allows you to take temperature readings without having to carry a separate instrument.</p>	<p>Electrical maintenance troubleshooting: When you need to eliminate false or “ghost” voltages or perform continuity, connection or basic wiring checks.</p> <p>Non-contact voltage detection: Integrated non-contact voltage detection simplifies many tasks.</p>	<p>Residential HVAC maintenance: Lower voltage HVAC residential maintenance, installation and troubleshooting.</p> <p>Temperature and microamp measurements: Troubleshooting problems with HVAC equipment and flame sensors.</p>	<p>Electronic troubleshooting: Troubleshoot a wide variety of measurement parameters, including frequency and capacitance.</p>	<p>Industrial troubleshooting in indoor and outdoor harsh environments: Dustproof, waterproof, shockproof multimeter designed to withstand the toughest environments.</p> <p>Working on VSDs: Take accurate voltage, current and frequency measurements on the output side of the drive at either the drive itself or at the motor terminals.</p>	<p>Combine a digital insulation tester with a full-featured, true-rms digital multimeter in a single, compact, handheld unit, which provides maximum versatility for both troubleshooting and preventative maintenance.</p> <p>Industrial troubleshooting: Whether you work on motors, generators, cables, or switch gear, the Insulation Multimeters is ideally suited for predictive and preventative maintenance measurement tasks in electrical and industrial applications. Polarity Index (Pi) and Dielectric Absorption Ratio (DAR) tests identify problems faster.</p>
	Yes (with ir3000 FC connector, sold separately)		Yes (see connected products on reverse side)						Yes (coming early 2016)
Basic features									
Counts	50,000	20,000	6,000	6,000	6,000	6,000	6,000	20,000	6,000
True-rms readings	ac+dc	ac	ac	ac	ac	ac	ac	ac	ac
Basic dc accuracy	0.025 %	0.05 %	0.09 %	0.09 %	0.5 %	0.5 %	0.5 %	0.05 %	0.09 %
Wide bandwidth	100 kHz	20 kHz						20 kHz	5 kHz
Auto/manual ranging	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•	•/•
Measurements									
Voltage ac/dc	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	1000 V	1000 V
Current ac/dc	10 A	10 A	400 mA	10 A	10 A	600 μA	10 A	10 A	400 mA
Resistance	500 MΩ	50 MΩ	50 MΩ	50 MΩ	40 MΩ	40 MΩ	40 MΩ	50 MΩ	50 MΩ
Frequency	1 MHz	200 kHz	100 kHz	100 kHz	100 kHz	100 kHz	100 kHz	200 kHz	100 kHz
Capacitance	100,000 μF	10,000 μF	10,000 μF	10,000 μF	10,000 μF	10,000 μF	10,000 μF	10,000 μF	10,000 μF
Temperature	(+) 1350 °C	(+) 1090 °C	(with t3000 FC*)	(+) 400 °C		(+) 400 °C		(+) 1090 °C	(+) 537 °C
Insulation test voltages									50, 100, 250, 500, 1000V
Pi/DAR timed ratio tests									•

*Sold separately


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Measurements									
Continuity/diode test	•	•	•	•	•	•	•	•	•
Motor Drive (ASD) Measurements	•	•						•	•
dB / Conductance (in nS)	60 dB / 50 nS	60 nS						60 nS	
Duty cycle/pulse width	•/•	•/-						•/-	
LoZ: low input impedance	•				•	•			
Lo ohms	•								
Microamps	•	•				•		•	
Display									
Dot matrix display/Dual display	•		•						
Analog bargraph	•	•		•	•	•	•	•	
Backlight	Two level	Two level	•	•	•	•	•	Two level	•
Graphical trend display	•								
Diagnostics and data									
Min/Max recording/with time stamp	•/•	•/-	•/-	•/-	•/-	•/-	•/-	•/-	•/-
Fast Min/Max	250 μs	250 μs						250 μs	
Display Hold/Auto (Touch) Hold	•/•	•/•	•/•	•/•	•/-	•/-	•/-	•/•	•/•
Relative reference	•	•						•	
Stand alone logging	•								
Trend capture	•								
Readings memories	10,000		(with FC app)						
USB interface	•								
Warranty and electrical safety									
Warranty (years)	Limited lifetime	Limited lifetime	3	Limited lifetime	3	3	3	Limited lifetime	3
Input alert	•	•						•	•
Dangerous voltage indication	•	•	•	•	•	•	•	•	•
IP rating	IP42	IP30	IP54		IP42	IP42	IP42	IP67	IP40
EN61010-1 CAT III	1000 V	1000 V	1000 V	1000 V	600 V	600 V	600 V	1000 V	1000 V
EN61010-1 CAT IV	600 V	600 V	600 V	600 V				600 V	600 V

Wirelessly relay data with Fluke Connect®
Meters can be used as a stand-alone tool or as part of the Fluke Connect system




The largest system of software and wireless test tools in the world.


ir3000 FC Connector
Adds the power of the Fluke Connect® mobile app to your measurements.

- Fits over the IR port of your existing Fluke tools (289, 287 or 789)
- Enables you to graph, save, and share readings with your team from your smart phone




a3000 FC Wireless AC Current Clamp Meter

- Measure up to 400 A ac true-rms
- Inrush function
- Logging function for recording and saving up to 65,000 readings




a3001 FC Wireless iFlex AC Current Clamp Meter

- Measure up to 2500 A ac with a true-rms flexible current meter
- Record over time (up to 65,000 readings) to monitor circuit load changes for an hour, a shift or a week




a3003 FC Wireless DC 2000 A Current Meter

- Measure up to 2000 A dc
- Large jaw size (64 mm) for measuring large, high current conductors
- Logging function for recording and saving up to 65,000 readings




a3004 FC Wireless DC 4-20 mA Current Meter

- Measure 4 to 20 mA dc signals without breaking the loop
- Logging function for recording and saving up to 65,000 readings




v3000 FC Wireless AC Voltage Meter

- Measure up to 1000 V true-rms ac
- Logging function for recording and saving up to 65,000 readings



v3001 FC Wireless DC Voltage Meter

- Measure up to 1000 V dc
- Logging function for recording and saving up to 65,000 readings



t3000 FC Wireless Temperature Meter

- Measure -200 °C to 1372 °C with k-type thermocouple
- Logging function for recording and saving up to 65,000 readings