

**TECHNICAL DATA** 

# Fluke 377 FC, 378 FC Non-Contact Voltage True-rms AC/DC Clamp Meters with iFlex



### MEASURE VOLTAGE AND CURRENT With your clamp jaw

### FASTER, SAFER TESTING

All without touching a live wire - using FieldSense™ technology

## POWER QUALITY INDICATOR

Shows whether equipment or power line is faulty

COMPLETE 3-PHASE VOLTAGE AND CURRENT TESTS

in 3 quick steps



# Voltage and current measurements with FieldSense™ technology

The Fluke 377 FC and 378 FC true-rms clamp meters use Field-Sense<sup>™</sup> technology to make testing faster and safer, all without touching a live conductor. You get accurate voltage and current measurements through the clamp jaw. Simply clip the black test lead to any electrical ground, put the clamp jaw around the conductor and see reliable, accurate voltage and current values on the display.

### Power quality indicator shows whether a problem is in the equipment or the power line (378 FC only)

The 378 FC clamp meter includes a unique PQ function that senses power quality issues automatically. When making FieldSense measurements, the 378 FC will detect and display power quality issues, relating to current, voltage, power factor or any combination of the three. Now you can quickly determine if an upstream supply problem exists, or if there is a downstream equipment problem.



The 378 FC includes a power quality test that provides quick indication of whether an incoming power problem or an equipment problem exists.



# Voltage and current measurements with FieldSense<sup>™</sup> technology

No more hand-written notes or complicated math.

- Complete 3-phase voltage and current tests in 3 easy steps
- Full set of phase-to-ground and phase-tophase values calculated
- Displayed on your smart phone and saved to the cloud via Fluke Connect software
- Phase rotation calculated and shown on the Fluke Connect software

# Measure extremely high current with iFlex<sup>™</sup> probe

Use the included iFlex flexible current probe to measure ac current as high as 2500 Å. The iFlex probe provides access to large conductors in tight spaces.

# Easy to see, easy to use with included tools

Your job will get easier when you use the 377FC and 378 FC clamp meter:

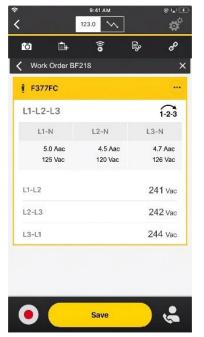
- The display turns green when a stable Field-Sense measurement is detected.
- Visual Continuity provides a bright green screen for easy detection of continuity in noisy work areas.
- The TPAK magnetic hanging kit, with 9 inch (23 cm) hanging strap, lets you hang your clamp wherever you need: to a steel cabinet door; around a pipe; on a nail or screw head.
- The included carrying case holds the clamp, iFlex probe, test leads and the included black grounding clip.

# Record, analyze, share results with Fluke Connect<sup>™</sup> software

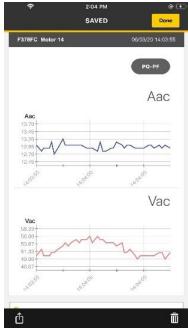
With Fluke Connect software you can remotely log, trend and monitor measurements to pinpoint intermittent faults. Fluke Connect also allows you to gather data as the basis for a preventive maintenance program.



Fluke Connect allows measurements to be sent to a smartphone for logging, collaboration and analysis.



Fluke Connect pulls all data related to three-phase measurements including phase rotation and presents the full set of data for analysis at a glance.

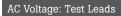


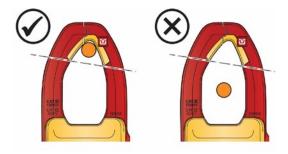
Data gathered by Fluke Connect can pinpoint elusive intermittent faults. Data collected over regular intervals can be used to spot small changes before they grow into major problems.



## **Specifications**

General specifications					
General Maximum voltage (between any terminal and earth ground)	1000 V				
Battery					
Туре	2 AA IEC LR6 alkaline				
Life	200 hours				
Display	Dual readout				
Automatic Power Off	20 minutes				
AC Current: Jaw					
Range		999.9 A			
Resolution	0.1 A				
Accuracy	2 % $\pm$ 5 digits (45 Hz to 66 Hz)				
Crest Factor (50/60 Hz)	3 @ 500 A 2.5 @ 600 A 1.42 @ 1000 A Add 2 % for C.F. >2				
AC Current: Flexible Current Probe					
Range	2500 A				
Resolution	1 A (≤ 2500 A) 0.1 A (≤ 999.9 A)				
Accuracy	3 % ±5 digits (5 Hz to 500 Hz)				
DC Current					
	Distance from Optimum	i2500-10 Flex	i2500-18 Flex	Error	
	A	0.5 in (12.7 mm)	1.4 in (35.6 mm)	± 0.5 %	
	В	0.8 in (20.3 mm)	2.0 in (50.8 mm)	± 1.0 %	
	С	1.4 in (35.6 mm)	2.5 in (63.5 mm)	± 2.0 %	
	Measurement uncertainty assumes centralized primary conductor at optimum position, no external electrical or magnetic field, and within operating temperature range.				
Range	999.9 A				
Resolution	0.1 A				
Accuracy					
AC Voltage: FieldSense		2 % ±5 digits			
Range	1000 V				
Resolution	1 V (≤ 1000 V)				
Accuracy		1 • (=			
$\leq 4/0 \text{ AWG}$	3 % ±5 digits (45 Hz to 66 Hz)				
≥ 4/0 AWG	$5\% \pm 5$ digits (45 Hz to 66 Hz)				





Position wire as close as possible to jaw opening (see illustration).



## **Specifications (continued)**

Range60.00 V 1000 VResolution1 % 5 500 V) 1 V (≤ 1000 V)Accuracy1 % 5 500 V) 1 V (≤ 1000 V)Range600.0 V 1000 VResolution0.1 V ≤ 600.0 V] 1 V (≤ 1000 V)Accuracy1 % 5 5 digitsmV dc600.0 mVResolution0.1 mVAccuracy1 % 5 5 digitsmV dc600.0 mVResolution0.1 mVAccuracy1 % 5 5 digitsmV dc7000 mVResolution0.1 mVAccuracy1 % 5 5 digitsAmps Frequency: Jaw10 HzRange50 Hz to 66 HzResolution0.1 HzAccuracy0.5 % 5 5 digitsTrigger Level10 Hz to 500 Hz10 Hz to 100 Hz ≥ 5 A 100 Hz to 500 HzRange50 Hz to 500 O HzRange50 Hz to 500 O HzRange60.00 NResolution0.1 HzAccuracy0.5 % ±5 digitsTrigger Level20 Hz to 500 O HzRange50 Hz to 500 O HzRange50 Hz to 500 O HzRange60.00 NStato 50 Mz to 500 O Hz10 HzRange0.1 HzAccuracy0.1 C Hz to 500 O HzRange50 Hz to 500 O HzRange50 Hz to 500 O HzRange10 Hz to 100 HzRange0.0 L HzRange50 O HzRange10 Hz to 100 HzRange10 Hz to 100 HzRange10 Hz to 100 HzRange10 Hz to 100 Hz <t< th=""><th>• •</th><th></th></t<>	• •			
1 \n \s 1 000 \n'       Accuracy     1 \n \s 2 0000 \n'       Range     600.0 \n'       Range     600.0 \n'       Resolution     0.1 \not \s 600.0 \n'       Accuracy     1 \n' \s 1 0000 \n'       Accuracy     1 \n' \s 5 digits       M do     0.1 \n'       Range     500.0 \n'       Resolution     0.1 \n'       Accuracy     1 \n' \s 5 digits       Accuracy     1 \n' \s 5 digits       Accuracy     0.0 \n'       Range     500.0 \n'       Resolution     0.1 \n'       Accuracy     0.1 \n'       Accuracy     0.1 \n'       Accuracy     0.0 \n'       Range     5.0 \n'       Resolution     0.1 \n'       Accuracy     0.0 \n'       Pabe     10 \n'       Range     5.0 \n'       Resolution     0.1 \n'       Accuracy     0.5 \n'       Pabe     20 \n'       Range     5.0 \n'       Resolution     0.1 \n'       Accuracy     0	Range	600.0 V 1000 V		
DC Voltage600.0 VRange $600.0 V$ Range $0.1 V \le 600.0 V$ Resolution $0.1 V \le 600.0 V$ Accuracy $1 \% \pm 5 \ digits$ mV dc $0.1 mV$ Range $500.0 mV$ Resolution $0.1 mV$ Accuracy $1 \% \pm 5 \ digits$ Ange Frequency: Jaw $0.1 mV$ Range $0.1 mV$ Accuracy $0.5 \% \pm 5 \ digits$ Ange Frequency: Jaw $0.1 mV$ Range $0.1 mZ$ Accuracy $0.5 \% \pm 5 \ digits$ Ange Frequency: Jaw $0.1 mZ$ Range $0.1 MZ$ Accuracy $0.5 \% \pm 5 \ digits$ Trigger Level $0.1 MZ$ Arge Frequency: Floxible Current ProboRange $0.0 MZ$ Range $0.0 MZ$ Statz to 500 HZ to 500.0 HZRange $0.0 MZ$ Range $0.0 MZ$ Statz to 20 HZ to 200 HZ $\ge 20 A$ I'giger Level $2 MZ$ Statz to 20 HZ to 20 HZ $\ge 25 A$ Resolution $0.1 HZ$ Accuracy $0.5 \% \pm 5 \ digits$ Trigger Level $2 MZ$ Statz to 20 HZ to 200 HZ $\ge 25 A$ Resolution $0.1 MZ$ Accuracy $1 \% \pm 5 \ digits$ Capacitance $0.0 \mu F$ Range $0.00 \mu F$ Resolution $0.1 \mu (s 6000 \mu)$ $1 \odot (s 6000 \mu)$	Resolution			
Range $600.0 \ V$ $1000 \ V$ Resolution $0 \ V \le 600.0 \ V$ $1 \ V (\le 1000 \ V)$ Accuracy $1 \ 9 \ \pm 5 \ digits$ $W \ do$ $0 \ W \ do$ Range $500.0 \ mV$ Resolution $0 \ 1 \ mV$ Accuracy $1 \ 9 \ \pm 5 \ digits$ Amps Frequency: Jaw $0 \ 1 \ mV$ Range $46 \ Hz \ to 66 \ Hz$ Resolution $0 \ 1 \ Hz$ Accuracy $0 \ 5 \ \% \ t \ 5 \ digits$ Amps Frequency: Jaw $0 \ 1 \ Hz$ Resolution $0 \ 1 \ Hz$ Accuracy $0 \ 5 \ \% \ t \ 5 \ digits$ Amps Frequency: Flexible Current Probe $0 \ 1 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 100 \ Hz \ge 5 \ A$ $100 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $5.0 \ Hz \ to 50.0 \ Hz$ Range $60.00 \ M$ $600.0 \ M$ Resolution $0 \ Hz \ to 50.0 \ Hz$ Range $60.00 \ M$ $600.0 \ M$ Resolution $0 \ Hz \ to 50.0 \ Hz$ Range $60.00 \ M$ $600.0 \ M$ Resolution $0 \ Hz \ to 50.0 \ Hz$ Range $60.00 \ M$ $600.0 \ M$ Resolution $1 \ $	Accuracy	1 % ±5 digits (20 Hz to 500 Hz)		
	DC Voltage			
I     V (≤ 1000 V)       Accuracy     1 % ± 5 digits       W dc     0       Range     500.0 mV       Resolution     0.1 mV       Accuracy     1 % ± 5 digits       Amps Frequency: Jaw     0       Range     45 Hz to 66 Hz       Resolution     0.1 Hz       Accuracy     0.5 % ± 5 digits       Trigger Level     5 Hz to 10 Hz, ≥ 10 A       Amps Frequency: Flexible Current Probe     100 Hz to 500.0 Hz       Range     5.0 Hz to 500.0 Hz       Resolution     0.1 Hz       Accuracy     0.5 % ± 5 digits       Trigger Level     5 Hz to 20 Hz, ≥ 25 A       Accuracy     0.1 Hz       Accuracy     0.1 Hz       Accuracy     0.1 Kz       Resolution     0.1 Hz       Accuracy     5 Hz to 20 Hz, ≥ 25 A       20 Hz to 100 Hz, ≥ 20 A     20 Hz to 100 Hz, ≥ 20 A       100 Hz to 5000.0 Hz     25 A       Resolution     0.1 C (≤ 600.0 C)       10 (E 60000 C)     10 (E 60000 C)       10 (E 5000 C)     10 (E 5000 C) <td< td=""><td>Range</td><td colspan="3"></td></td<>	Range			
mV dcSolo 0 mVRangeSOU 0 mVResolution0.1 mVAccuracy1 % ± 5 digitsAmps Prequency: JawAmps Prequency: JawRange45 Hz to 66 HzResolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger Level5 Hz to 10 Hz, $\geq 10$ A 10 Hz to 100 Hz, $\geq 5$ A 100 Hz to 500 HzRange5.0 Hz to 50.0.0 HzRangeS.0 Hz to 50.0.0 HzResolution0.1 HzAmps Prequency: Plexible Current Probe $20$ Hz to 500.0 HzRangeS.0 Hz to 500.0 HzResolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger Level5 Hz to 20 Hz, $\geq 25$ AResolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger Level5 Hz to 20 Hz, $\geq 25$ AResolution0.1 G ( $\leq 60.00$ PL $= 20$ A 100 Hz to 500 Hz, $\geq 25$ AResolution0.1 0 ( $\leq 60.00$ PL $= 20$ A 100 Hz to 500 Hz, $\geq 25$ AResolution0.1 0 ( $\leq 60.00$ PL $= 20$ A 100 Hz to 500 Hz, $\geq 25$ AResolution0.1 0 ( $\leq 60.00$ PL $= 1000$ PL 1 G ( $\leq 60.00$ PL 1 G ( $\leq 60$	Resolution			
RangeSOO.0 mVResolution0.1 mVAccuracy1 % ± 5 digitsAmps Frequency: JawEsolutionRange45 Hz to 66 HzResolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger Level5 Hz to 104 Hz, ≥ 10 A 10 Hz to 100 Hz, ≥ 5 A 100 Hz to 500 Hz, ≥ 10 AAmps Frequency: Flexible Current ProbeCarcuracyRange5.0 Hz to 500.0 Hz 2 00 Hz, ≥ 5 A 100 Hz to 500 Hz, ≥ 10 ARange5.0 Hz to 500.0 Hz 2 0 A 100 Hz to 500 Hz, ≥ 25 A 20 Hz to 20 Hz, ≥ 25 A 20 Hz to 500 Hz, ≥ 25 A 20 Hz to 500 Ch 2 0 Hz to 500 Ch 2 0 ARange60.00 kΩ 6000 Ω 6000 ΩRange60.00 kΩ 6000 Ω 100 Hz to 500 Hz, ≥ 25 A 20 Hz to 100 Hz, ≥ 25 A 100 Hz to 500 Hz, ≥ 25 A 20 Hz to 100 Hz to 500 Hz, ≥ 25 A 20 Hz to 100 Hz, ≥ 25 A 20 Hz to 100 Hz to 500 Hz, ≥ 25 A 20 Hz to 100 Hz to 500 Hz, ≥ 25 A 20 Hz to 100 Hz to 500 CΩ 100 Hz to 500 Ω 100 Ω (≤ 60.00 Q) 10 Ω (≤ 60.00 Q) 10 Ω (≤ 60.00 KΩ)Accuracy0.1 μ F (≤ 100.0 μF) 1 F (≤ 10	Accuracy	1 % ± 5 digits		
Resolution     0.1 mV       Accuracy     1 % ± 5 digits       Amps Prequency: Jaw	mV dc			
Accuracy1 % ± 5 digitsAmps Frequency: Jaw $Range45 Hz to 66 HzResolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger Level10 Hz to 100 Hz to 500 Hz \geq 5 A100 Hz to 500 Hz \geq 25 A20 Hz to 100 Hz \geq 25 A20 Hz to 500 Hz \leq 2$	Range	500.0 mV		
Amps Frequency: Jaw45 Hz to 66 HzRange45 Hz to 66 HzResolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger Level10 Hz to 100 Hz, $\geq$ 5.010 Hz to 100 Hz, $\geq$ 5.0 Hz10 A10 Hz to 500 Hz, $\geq$ 10 A10 Hz100 Hz to 500 Hz, $\geq$ 10 AAmps Frequency: Flexible CurrentProbeRange5.0 Hz to 500.0 HzResolution0.1 HzAccuracy0.5 % ±5 digitsTrigger Level5 Hz to 20 Hz, $\geq$ 25 A20 Hz to 100 Hz, $\geq$ 20 A100 Hz to 500 Q6000 Q600	Resolution	0.1 mV		
Range46 Hz to 66 HzResolution0.1 HzAccuracy0.6 % ± 5 digitsTrigger Level5 Hz to 10 Hz, ≥ 10 A 100 Hz to 500 Hz, ≥ 10 A 100 Hz to 500 Hz, ≥ 10 AAnngs Frequency: Flexible Current ProbeRange0.1 HzRange0.1 HzAccuracy0.1 HzAccuracy0.1 HzAccuracy0.1 HzArger Level5 Hz to 20 Hz, ≥ 25 A 20 Hz to 20 Hz, ≥ 25 A 100 Hz to 500 Hz, ≥ 20 A 100 Hz to 500 Hz, ≥ 20 A 100 Hz to 500 Hz, ≥ 25 AResistanceRange60.00 kΩ 6000 Ω 6000 ΩResolution0.1 Ω (\$ 6000 Ω) 6000 Ω 10 Ω (\$ 6000 Ω) 10 Ω (\$ 6000 Ω) <td>Accuracy</td> <td colspan="3">1 % ± 5 digits</td>	Accuracy	1 % ± 5 digits		
Resolution0.1 HzAccuracy0.5 % ± 5 digitsTrigger LevelS Hz to 10 Hz, $\geq$ 10 A 10 Hz to 100 Hz, $\geq$ 5 A 100 Hz to 100 Hz, $\geq$ 5 AAmps Frequency: Flexible Current Probe	Amps Frequency: Jaw			
Accuracy $0.5\% \pm 5$ digitsTrigger Level $S$ Hz to 10 Hz, $\geq 10$ A 10 Hz to 100 Hz, $\geq 5$ A 10 Hz to 500 Hz, $\geq 10$ A 10 Hz to 500 Hz, $\geq 10$ AAmps Frequency: Flexible Current Probe $-$ Range $S.0$ Hz to 500.0 HzResolution $0.1$ HzAccuracy $0.5\% \pm 5$ digitsTrigger Level $S$ Hz to 20 Hz, $\geq 25$ A 20 Hz to 100 Hz, $\geq 20$ A 100 Hz to 500 Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 20$ A 100 Hz to 500 O Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 20$ A 100 Hz to 500 O Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 20$ A 100 Hz to 500 O Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 20$ A 100 Hz to 500 O Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 20$ A 100 Hz to 500 O Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 20$ A 100 Hz to 500 O Hz, $\geq 20$ A 20 Hz to 100 Hz, $\geq 0.00$ A 00 O Hz, $\geq 0.00$ A 10 Hz to 500 O Hz, $\geq 1000 0 \text{ H}$ Resolution $0.1 \Omega$ ( $\leq 60.00$ kO) $600.00$ O $1 \Omega$ ( $\leq 60.00$ kO) $10 \Omega$ ( $\leq 60.00$ kO) $10 \Omega$ ( $\leq 60.00$ kD) $10 \Omega$ ( $\leq 60.00$ RD) $10 \Omega$ ( $\leq 60.00$ RD) $10 \Omega$ ( $\leq 60.00$ RD) $1$	Range	45 Hz to 66 Hz		
Trigger LevelS Hz to 10 Hz, $\geq$ 10 A 10 Hz to 100 Hz, $\geq$ 5 A 100 Hz to 500 Hz, $\geq$ 10 AAmps Frequency: Plexible Current ProbeRangeS.0 Hz to 500.0 HzRangeS.0 Hz to 500.0 HzResolution0.1 HzAccuracy0.5 % ±5 digitsTrigger LevelS Hz to 20 Hz, $\geq$ 25 A 20 Hz to 100 Hz, $\geq$ 20 A 100 Hz to 500 Hz, $\geq$ 20 A 100 Hz to 500 Hz, $\geq$ 25 AResistanceRange60.00 kD 6000 Ω 6000 Ω 6000 Ω 1 Ω ( $\leq$ 600.0 kD 1 Ω ( $\leq$ 600.0 Q) 1 Ω (	Resolution	0.1 Hz		
Corr10 Hz to 100 Hz to 50 Hz, $\ge$ 5 A 100 Hz to 500 Hz, $\ge$ 10 AAmps Frequency: Flexible Current ProbeRange5.0 Hz to 500.0 HzRange0.1 HzAccuracy0.5 % ±5 digitsTrigger Level $S$ Hz to 20 Hz, $\ge$ 25 A 20 Hz to 100 Hz, $\ge$ 20 A 100 Hz to 500 Hz, $\ge$ 25 AResistance $0.000 Hz$ Range $0.000 Hz$ Range $0.000 Hz$ Range $0.000 Lz$ Range $0.000 Lz$ Resolution $10 [ \le 600.0 \Omega)$ $10 [ \le 600.0 \Omega0000 LzResolution10 [ \le 600.0 \Omega)10 G [ \le 600.0 \Omega10 G [ \le 600.0 \Omega10 G [ \le 600.0 \Omega10 G [ \le 600.0 \OmegaRange0.000 \mu FRange0.000 \mu FRange0.000 \mu FRange0.000 \mu FRange0.000 \mu FResolution1 \% 1 \le 100.0 \mu FSize (L x W x H)0 = 34 \text{ mm x 86 mm x 47 mm}Weight (with Batteries)463 \text{ g}Jaw Opening34 \text{ mm}Flexible Current Probe Diameter7.5 \text{ mm}Flexible Current Probe Cable Length1.8 \text{ m}$	Accuracy	0.5 % ± 5 digits		
Probe     Image       Range     S.O. Hz to SOO. Hz       Resolution     0.1 Hz       Accuracy     O.S.5 % ± 5 digits       Trigger Level     S Hz to SO. Hz, ≥ 25 Å       Resistance     20 Hz to 100 Hz, ≥ 20 Å       Range     60.00 kΩ       6000 Ω     6000 Ω       8     10 (≤ 6000 Ω)       1 Ω (≤ 6000 Ω)     1 Ω (≤ 6000 Ω)       1 Ω (≤ 6000 Ω)     1 Ω (≤ 6000 Ω)       1 Ω (≤ 6000 Ω)     1 Ω (≤ 6000 Ω)       1 Ω (≤ 6000 Ω)     1 Ω (≤ 6000 Ω)       1 Ω (≤ 6000 Ω)     1 Ω (≤ 6000 Ω)       Accuracy     01 Ω (≤ 6000 Ω)       Resolution     0.1 Ω (≤ 6000 Ω)       Accuracy     0.1 Ω (≤ 6000 µF)       Accuracy     1 % ± 4 digits       Mechanical     3       Size (L x W x H)     274 mm x 86 mm x 47 mm <tr< td=""><td>Trigger Level</td><td>10 Hz to 100 Hz, ≥ 5 A</td></tr<>	Trigger Level	10 Hz to 100 Hz, ≥ 5 A		
No0.1 HzAccuracy $0.5 \% \pm 5$ digitsTrigger Level $5$ Hz to $20$ Hz, $\ge 25$ A $20$ Hz to $100$ Hz, $\ge 20$ A $100$ Hz, $\ge 20$ A $100$ Hz, $\ge 25$ AResistance $0.1 \Omega (z \delta 0.0 0 R)$ $6000 \Omega$ $6000 \Omega$ $10 (z 6000 \Omega)$ $10 (z 6000 \Omega)$ $1$				
Accuracy $0.5\% \pm 5$ digitsTrigger Level $5$ Hz to $20$ Hz, $\ge 25$ A $20$ Hz to $100$ Hz, $\ge 20$ A $100$ Hz to $500$ Hz, $\ge 25$ AResistance $0.10$ Hz to $500$ Hz, $\ge 25$ ARange $60.00$ kΩ $6000$ Ω $6000$ Ω $6000$ ΩResolution $0.1 \Omega$ ( $\le 600.0 \Omega$ ) $1 \Omega$ ( $\le 600.0 \Omega$ ) $1 \Omega$ ( $\le 600.0 \Omega$ ) $1 \Omega$ ( $\le 600.0 \Omega$ )Accuracy $0.1 \Omega$ ( $\le 600.0 \Omega$ ) $1 \Omega$ ( $\le 600.0 \Omega$ ) $1 \Omega$ ( $\le 600.0 \Omega$ )Accuracy $0.1 \Omega$ ( $\le 600.0 \Omega$ ) $1 \Omega$ ( $\le 600.0 \Omega$ ) $10 \Omega$ ( $\le 600.0 \Omega$ )Range $0.1 \Omega$ ( $\le 600.0 \Omega$ ) $10 \Omega$ ( $\le 600.0 \Omega$ )Range $0.00 \mu$ FRange $1000 \mu$ FRange $1000 \mu$ FResolution $0.1 \mu$ ( $\le 1000 \mu$ F) $1 F (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \mu f (\le 1000 \muF)Accuracy0.1 \muF (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \muF (\le 1000 \muF)1 F (\le 1000 \muF)Accuracy0.1 \muF (\le 1000 $	Range	5.0 Hz to 500.0 Hz		
Trigger LevelS Hz to 20 Hz, $\geq$ 25 A 20 Hz to 100 Hz, $\geq$ 20 A 100 Hz to 500 Hz, $\geq$ 25 AResistanceRange $60.00 k\Omega$ $6000 \Omega$ $6000 \Omega$ $10 \Omega (\leq 6000 \Omega)10 \Omega (\leq 6000 \Omega)10 \Omega (\leq 6000 R)Accuracy0 1 \Omega ( \leq 6000 \Omega)10 \Omega (\leq 000 \Omega)10 \Omega (\leq 000 \Omega)1$	Resolution	0.1 Hz		
20 Hz to 100 Hz, $\geq$ 20 A 100 Hz to 500 Hz, $\geq$ 25 AResistanceRange $60.00 k\Omega$ $6000 \Omega$ $6000 \Omega$ $6000 \Omega$ $6000 \Omega$ Resolution $0.1 \Omega (\leq 60.00 \Omega)$ $1 \Omega (\leq 60.00 k\Omega)$ Resolution $0.1 \Omega (\leq 60.00 \Omega)$ $1 0 \Omega (\leq 60.00 k\Omega)$ Accuracy $0.1 0 \Omega (\leq 60.00 k\Omega)$ Range $0.00 \mu F$ Range $1000 \mu F$ Resolution $0.1 \mu F (\leq 100.0 \mu F)$ $1 F (\leq 1000 \mu F)$ Accuracy $0.1 \eta \Psi f \leq 100.0 \mu F)$ Resolution $0.1 \psi f (\leq 100.0 \mu F)$ $1 F (\leq 1000 \mu F)$ Accuracy $0.1 \eta \Psi f (\leq 100.0 \mu F)$ $1 G (\leq 0.00 M F)$ Mechanical $0.1 \eta \Psi f (\leq 100.0 \mu F)$ $1 G (\leq 0.00 M F)$ Size [L x W x H] $0.1 \eta H (\leq 0.00 \eta H)$ $1 G (\leq 0.00 \eta H)$ Veight (with Batteries) $463 g$ Jaw Opening $463 g$ Flexible Current Probe Diameter $7.5 mm$ Flexible Current Probe Cable Length (head to electronics connector) $1.8 m$	Accuracy	0.5 % ±5 digits		
Range $60.00 k\Omega$ $600.0 \Omega$ $600.0 \Omega$ Resolution $0.1 \Omega (\leq 60.00 \Omega)$ $1 \Omega (\leq 60.00 k\Omega)$ $1 \Omega (\leq 60.00 k\Omega)$ Accuracy $0.1 \Omega (\leq 60.00 k\Omega)$ Accuracy $0.1 \Omega (\leq 60.00 k\Omega)$ Range $0.1 \Omega (\leq 60.00 \muR)$ Range $0.1 \Omega (\leq 60.00 \muF)$ Resolution $0.1 \mu F (\leq 100.0 \mu F)$ $1 F (\leq 100.0 \mu F)$ Accuracy $0.1 \Omega (\pm 4 \text{ digits})$ Accuracy $0.1 \Omega (\pm 4 \text{ digits})$ Mechanical $0.1 \Omega (\pm 4 \text{ digits})$ Size (L x W x H) $0.1 \Omega (\pm 4 \text{ digits})$ Weight (with Batteries) $0.1 \Omega (\pm 4 \text{ digits})$ Jav Opening $0.1 \Omega (\pm 3 \text{ mm})$ Flexible Current Probe Diameter $7.5 \text{ mm}$ Flexible Current Probe Cable Length (head to electronics connector) $1.8 \text{ m}$	Trigger Level	5 Hz to 20 Hz, ≥ 25 A 20 Hz to 100 Hz, ≥ 20 A		
	Resistance			
l $\Omega$ ( $\leq$ 6000 $\Omega$ )Accuracy10 $\Omega$ ( $\leq$ 60.00 k $\Omega$ )Accuracy1 $\%$ ±5 digitsCapacitance1000 $\mu$ FRange1000 $\mu$ FResolution0.1 $\mu$ F ( $\leq$ 100.0 $\mu$ F) 1 F ( $\leq$ 1000 $\mu$ F)Accuracy34 digitsMechanical274 mm x 86 mm x 47 mmWeight (with Batteries)463 gJaw Opening34 mmFlexible Current Probe Diameter7.5 mmFlexible Current Probe Cable Length (Hand to electronics connector)1.8 m	Range	6000 Ω		
CapacitanceRange $1000 \mu F$ Resolution $0.1 \mu F (\le 100.0 \mu F)$ $1 F (\le 1000 \mu F)$ Accuracy $1\% \pm 4$ digitsMechanicalSize (L x W x H) $274 mm x 86 mm x 47 mm$ Weight (with Batteries) $463 g$ Jaw Opening $34 mm$ Flexible Current Probe Diameter $7.5 mm$ Flexible Current Probe Cable Length (head to electronics connector) $18 m$	Resolution	1 Ω (≤ 6000 Ω)		
Range1000 μFResolution0.1 μF (≤ 100.0 μF) 1 F (≤ 1000 μF)Accuracy0.1 % ±4 digitsMechanical1Size (L x W x H)274 mm x 86 mm x 47 mmWeight (with Batteries)463 gJaw Opening34 mmFlexible Current Probe Diameter7.5 mmFlexible Current Probe Cable Length o1.8 m	Accuracy	$1 \% \pm 5$ digits		
Resolution $0.1 \ \mu F (\le 100.0 \ \mu F)$ $1 \ F (\le 1000 \ \mu F)$ Accuracy $1 \ W \le 1000 \ \mu F)$ Accuracy $1 \ W \le 1000 \ \mu F)$ Mechanical $21 \ W \ x \ H)$ Size (L x W x H) $274 \ mm \ x \ 86 \ mm \ x \ 47 \ mm$ Weight (with Batteries) $463 \ g$ Jaw Opening $34 \ mm$ Flexible Current Probe Diameter $7.5 \ mm$ Flexible Current Probe Cable Length (Head to electronics connector) $1.8 \ m$	Capacitance			
I F (≤ 1000 μF)Accuracy1 % ±4 digitsMechanicalSize (L x W x H)274 mm x 86 mm x 47 mmWeight (with Batteries)463 gJaw Opening34 mmFlexible Current Probe Diameter7.5 mmFlexible Current Probe Cable Length ou1.8 m	Range	1000 μF		
MechanicalSize (L x W x H)Weight (with Batteries)Jaw OpeningFlexible Current Probe DiameterFlexible Current Probe Cable Length (head to electronics connector)	Resolution	0.1 μF (≤ 100.0 μF)		
Size (L x W x H)274 mm x 86 mm x 47 mmWeight (with Batteries)463 gJaw Opening34 mmFlexible Current Probe Diameter7.5 mmFlexible Current Probe Cable Length (head to electronics connector)1.8 m	Accuracy	1 % ±4 digits		
Weight (with Batteries)463 gJaw Opening34 mmFlexible Current Probe Diameter7.5 mmFlexible Current Probe Cable Length (head to electronics connector)1.8 m	Mechanical			
Jaw Opening34 mmFlexible Current Probe Diameter7.5 mmFlexible Current Probe Cable Length (head to electronics connector)1.8 m	Size (L x W x H)	274 mm x 86 mm x 47 mm		
Flexible Current Probe Diameter7.5 mmFlexible Current Probe Cable Length (head to electronics connector)1.8 m	Weight (with Batteries)	463 g		
Flexible Current Probe Cable Length (head to electronics connector)	Jaw Opening	-		
(head to electronics connector)	Flexible Current Probe Diameter			
Rogowski Coil Length 450 mm		1.8 m		
	Rogowski Coil Length	450 mm		



Environmental			
Operating Temperature	-10 °C to 50 °C		
Storage Temperature	-40 °C to 60 °C		
Operating Humidity (without condensation)	Non condensing (<10 °C) ≤ 90 % RH (10 °C to 30 °C) ≤ 75 % RH (30 °C to 40 °C) ≤ 45 % RH (40 °C to 50 °C)		
Temperature Coefficients	Add 0.1 x specified accuracy for each degree C >28 °C or <18 °C		
Ingress Protection	IEC 60529: IP30 (jaw closed)		
Operating Altitude	2000 m		
Storage Altitude	12 000 m		
Electromagnetic Compatibility (EMC)			
International	IEC 61326-1: Portable Electromagnetic Environment IEC 61326-2-2, CISPR 11: Group 1, Class B		
	Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.		
	Class B: Equipment is suitable for use in domestic establishments and in establishments directly connected to a low voltage power supply network which supplies buildings used for domestic purposes.		
	Emissions that exceed the levels required by CISPR 11 can occur when the equipment is connected to a test object.		
Korea (KCC)	Class A equipment (Industrial Broadcast & Communications Equipment)		
	Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.		
USA (FCC)	47 CFR 15 subpart B. This product is considered an exempt device per clause 15.103.		
Safety			
General	IEC 61010-1: Pollution degree 2		
Measurement	IEC 61010-2-032: CAT III 1000 V / CAT IV 600 V IEC 61010-2-033: CAT III 1000 V / CAT IV 600 V		
Current Clamp for Leakage Current Measurements	IEC 61557-13: Class 2, $\leq$ 30 A/m		
Wireless Radio			
Radio Frequency Certification	FCC ID: T68-FBLE IC:6627A-FBLE		
Frequency Range	2405 MHz to 2480 MHz		
Output Power	<100 mW		
Radio Frequency Data	Go to www.fluke.com and search for "Radio Frequency Data for Class A" (PN 4333628) SIMPLIFIED EU DECLARATION OF CONFORMITY Hereby, Fluke declares that the radio equipment contained in this Product is in compliance with Directive 2014/53/EU. The full text of the EU declaration is available at the following internet address: www.fluke.com/declaration-of-conformity		

## FLUKE ®

## **Ordering information**

### FLUKE-378 FC

### Included

Fluke 378 FC Non-Contact Voltage True-rms AC/DC Clamp Meter **TL224** Test Leads **TP175** TwistGuard<sup>™</sup> Test Probes **AC285** black grounding clip (1 only) **i2500-18 iFlex**® Flexible Current Probe 18 inch (48 cm) **TPAK** ToolPak<sup>™</sup> Magnetic Meter Hanger Premium carrying case Quick reference guide

#### FLUKE-377 FC

#### Included

Fluke 377 FC Non-Contact Voltage True-rms Wireless AC/DC Clamp Meter **TL224** Test Leads **TP175** TwistGuard<sup>™</sup> Test Probes **AC285** black grounding clip (1 only) **i2500-18 iFlex**® Flexible Current Probe 18 inch (48 cm) **TPAK** ToolPak<sup>™</sup> Magnetic Meter Hanger Premium carrying case Quick reference guide

Visit **www.fluke.com** to get complete details on these products or ask your local Fluke sales representative.



#### Preventive maintenance simplified. Rework eliminated.

Save time and improve the reliability of your maintenance data by wirelessly syncing measurements using the Fluke Connect system.

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- Maximize uptime and make confident maintenance decisions with data you can trust and trace.
- Move away from clipboards, notebooks and multiple spreadsheets with a wireless one-step measurement transfer.
- · Access baseline, historical and current measurements by asset.
- Share your measurement data using ShareLive<sup>™</sup> video calls and emails.
- The Fluke 377 FC and Fluke 378 FC clamp meters are part of a growing system of connected test tools and equipment maintenance software. Visit the Fluke website to learn more about the Fluke Connect system.

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Smartphone wireless service and data plan not included with purchase. Fluke Connect is not available in all countries.

### Fluke. Keeping your world up and running.®

Fluke Corporation PO Box 9090, Everett, WA 98206 U.S.A.

**Fluke Europe B.V.** PO Box 1186, 5602 BD Eindhoven, The Netherlands

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#### For more information call: In the U.S.A. (800) 443-5853 or Fax (425) 446-5116 In Europe/M-East/Africa +31 (0)40 267 5100 or Fax +31 (0)40 267 5222 In Canada (800)-36-FLUKE or Fax (905) 890-6866 From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116 Web access: http://www.fluke.com

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