

# 28II EX

ROBUST AND INTRINSICALLY SAFE

CERTIFICATION	
<b>ATEX</b> 	<ul style="list-style-type: none"> <li>II 2 G Ex ia IIC T4 Gb</li> <li>I M1 Ex ia I Ma</li> </ul>
<b>IECEX</b> 	<ul style="list-style-type: none"> <li>Ex ia IIC T4 Gb</li> <li>Ex ia I Ma</li> </ul>
<b>NEC/CEC</b> 	<ul style="list-style-type: none"> <li>Class I, Division 1, Groups A,B,C,D</li> <li>Class I Zone 1 AEx ia IIC T4</li> <li>Ex ia IIC T4</li> </ul>
<b>EAC</b> 	<ul style="list-style-type: none"> <li>P0 Ex ia I Ma X</li> <li>1Ex ia IIC T4 Gb X</li> <li>IP6X</li> </ul>

CERTIFICATION	
<b>PCEC</b> 	Ex ia IIC T4 Gb
<b>INMETRO</b> Segurança 	Ex ia IIC T4 Gb
<b>ANZEX</b> 	Ex ia I Ma



## WATER AND DUSTPROOF

The 28 II EX carries the most important Ex-certifications and is also tested for drops of up to 3 meters. Additionally it is waterproof and dustproof (IP67). Therefore, the 28 II EX DMM can survive the roughest treatment in the harshest environments.



## Multimeter FLUKE 28II EX FOR ZONE 1

### FEATURES & FUNCTIONS

- CAT III 1000 V/CAT IV 600 V
- Dustproof, waterproof (IP67)
- Measures up to 1000V / 10A (outside of the Ex-hazardous area)
- Min/Max/Avg and Peak capture
- Low pass filter for accurate measurements on variable speed motor drives
- Input alert
- 4½" digit display (20,000 counts) with backlight

### APPROVALS

The Fluke 28 II EX is available with different approvals - from ATEX to IECEx to NEC, so that the corresponding versions enable worldwide use on different continents in potentially explosive environments.

This makes the multimeter a perfect example of portable, intrinsically safe measurement instruments - not least of all due to the numerous features unique to this kind of measurement devices.



### EASY TO USE

- Backlit keypad for extra visibility in poor lit areas
- Large display digits and 2-level backlight
- Long battery life: 400 hours typical (without backlight)

### HANDLING BENEFITS

- Only one DMM is needed because of the safe and compact solution which allows safe measurement both inside and outside (max. 10A / 1000V) the Ex-hazardous area
- A separate battery compartment makes it easy to change batteries on fuses

### EXTREME RUGGEDNESS

- Completely sealed IP67 rated case
- Water and dustproof
- Meets IEC Overvoltage Electrical Safety Standard EN 61010-1:2001:CAT III 1000V and CAT IV 600V

# 28 II EX

CAN BE USED WORLDWIDE

## ACCESSORIES

ARTICLE NO.	PRODUCT DESCRIPTION	
481761	Replacement protection module 440mA f. 28 II EX	
484495 	Temperature sensor 80PK-27	
483770 	AC Clamp i400 (400A)	
482713 	Leather case with strap	
482770 	TL175 Twist Guard Test Leads	
	Various Calibration on Request	

## TECHNICAL DATA

Ambient temperature	Different temperature ranges for $T_{amb}$ are fixed by the type approved batteries.
Storage temperature	-40°C ... +60°C without batteries
Power supply	3 x AAA, type-proofed
Operating time	approx. 400 h
Dimensions	approx. 210 x 100 x 64 mm (with holster)
Weight	approx. 690 g
Protective rating	IP67

## STANDARD DELIVERY

- Fluke 28 II EX
- Ex-holster
- Alligator clips
- Test leads TL175
- Batteries
- Documentation
- CD-ROM

## SPECIFICATION

DC voltage	Range: Accuracy:	0.1 mV to 1000 V ± 0.05 % + 1
AC voltage	Range: Accuracy:	0.1 mV to 1000 V ± 0.7 % + 4
DC current	Range: Accuracy:	0.1 µA to 10 A ± 0.2 % + 4
AC current	Range: Accuracy:	0.1 µA to 10 A ± 1.0 % + 2
Resistance	Range: Accuracy:	0.1 Ω to 50 MΩ ± (0.2 % + 1)
Conductance	Range: Accuracy:	60.00 nS ± (1.0 % + 10)
Diode test	Range: Accuracy:	2.0 V ± (2.0 % + 1)
Duty cycle	Range: Accuracy:	0.0 % to 99.9 % Within ± (0.2 % per kHz + 0.1 %) for rise times < 1 µs
Display counts		6000 counts / 19.999 counts in high-resolution mode
Capacitance	Range: Accuracy:	10 nF to 9999 µF ± (1.0 % + 2)
Frequency	Range: Accuracy:	0.5 Hz to 199.99 kHz ± (0.005 % + 1)
Temperature	Range: Accuracy:	-200 °C to +1090 °C [-328 °F to +1994 °F] ± (1.0 % + 10) °C [± (1.0 % + 10) °F]

Error: % of reading + number of digits

## REMARKS

Measurement inside the Ex-hazardous area:

$U_i \leq 65V, I_i \leq 5A$

Measurement outside the Ex-hazardous area:

$U_i \leq 1000V, I_i \leq 10A$