

# Intrinsically-Safe Multimeter Fluke 28 II Ex

28 II Ex: the most rugged intrinsically safe multimeter in the world. With a various range of approvals the DMM can be used globally!



# Intrinsically safe and rugged

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 dustproofed (IP67) as well. Therefor the 28 II Ex DMM survives the roughest treatment in the harshest environments.

# Intrinsic safety and approvals

 ATEX, IECEx, Mining (NEC and GOST approval pending)

#### Extreme ruggedness

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

### Easy to use

- Backlit keypadbuttons 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
- CAT III 1000V / CAT IV 600V
- 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

#### Standard delivery:

- Ex-holster
- Alligator clips
- Test leads
- Batteries
- Manual
- Certificate / EC-declaration of conformity
- CD-ROM

#### Optional accessories:

- Thermocouple 80BK-A
- Temperature probe 80PK-27
- AC current clamp i400
- Factory calibration
- DKD calibration

(all accessories are allowed to be used in Ex-hazardous area)

# Download

- Ex-certificate
- Instruction manual
- EC-declaration of conformity

#### ATEX:

Ex-designation:

© II 2 G Ex ia IIC T4 Gb

© II 2 D Ex ia IIIC T130° Db

© I M1 Ex ia I Ma

EC-Certificate of Conformity:
PTB 11 ATEX 2028 X

## IECEx:

Ex-designation: Ex ia IICT4 Gb Ex ia IIICT130°C Db Ex ia I Ma EC-Certificate of Conformity: IECEx PTB 11.0080X

(NEC and GOST approval pending)

Technical Data:	
Operating temperature:	-15 °C +50 °C
Power supply:	3 x AAA, type-proofed
Operating time:	approx. 400h
Dimensions:	approx. $210 \times 100 \times 64$ mm (with holster)
Weight:	approx. 690 g
IP rating:	IP67





# Intrinsically-Safe Multimeter Fluke 28 II Ex

Specification:		
DC voltage	Range:	0.1 mV to 1000 V
	Accuracy:	± 0.05 % + 1
AC voltage	Range:	0.1 mV to 1000 V
	Accuracy:	± 0.7 % +4
DC current	Range:	0.1 μA to 10 A
	Accuracy:	± 0.2 % + 4
AC current	Range:	0.1 μA to 10 A
	Accuracy:	± 1.0 % + 2
Resistance	Range:	0.1 $\Omega$ to 50 M $\Omega$
	Accuracy:	± (0.2 % + 1)
Conductance	Range:	60.00 nS
	Accuracy:	± (1.0 % + 10)
Diode test	Range:	2.0 V
	Accuracy:	± (2.0 % + 1)
Duty cycle	Range:	0.0 % to 99.9 %
	Accuracy:	Within $\pm$ (0.2 % per kHz + 0.1 %) for rise times <1 $\mu$ s
Display counts		6000 counts/19,999 counts in high-resolution mode
Capacitance	Range:	10 nF to 9999 μF
	Accuracy:	± (1.0 % + 2)
Frequency	Range:	0.5 Hz to 199.99 kHz
	Accuracy:	± (0.005 % + 1)
Temperature	Range:	-200 °C to +1090 °C (-328 °F to +1994 °F)
	Accuracy:	± (1.0 % + 10) °C [± (1.0 % + 10) °F]

Error: % of reading +number of digits

# Remarks:

Measurement inside the Ex-hazardous area: Ui  $\leq$  65V,Ii  $\leq$  5A

Measurement outside the Ex-hazardous area: Ui  $\leq$  1000V, Ii  $\leq$  10A



