

# ACCREDITED MEASUREMENT UNCERTAINTY

## VOLTAGE (DC)



RANGE	MEASUREMENT UNCERTAINTY
0 V to ≤ 1 V	$1.65 \times 10^{-5}$ V
>1 V to ≤ 10 V	$7.5 \times 10^{-5}$ V
>10 V to ≤ 100 V	$7.0 \times 10^{-4}$ V
>100 V to ≤ 1000 V	$6.1 \times 10^{-3}$ V

## VOLTAGE (AC)



RANGE	MEASUREMENT UNCERTAINTY
≥0.1 V to ≤ 1 V ≥50 Hz to ≤ 100 kHz	$9.5 \times 10^{-4}$ V
>1 V to ≤ 10 V ≥50 Hz to ≤ 100 kHz	$9.5 \times 10^{-3}$ V
≥1 V to ≤ 10V >100 kHz to ≤ 1 MHz	$1.2 \times 10^{-1}$ V
>10 V to ≤ 100 V ≥50 Hz to ≤ 100 kHz	$1.5 \times 10^{-1}$ V
>100 V to ≤ 1000 V ≥50 Hz to ≤ 1 kHz	$5.5 \times 10^{-1}$ V

## RESISTANCE (DC)



RANGE	MEASUREMENT UNCERTAINTY
≥0.1 Ω to ≤ 100 Ω	$1.16 \times 10^{-3}$ Ω
>0.1 kΩ to ≤ 100 kΩ	$1.15 \times 10^{-3}$ kΩ
>0.1 MΩ to ≤ 10 MΩ	$6.4 \times 10^{-3}$ MΩ



DEWETRON

## CURRENT (DC)



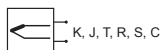
RANGE	MEASUREMENT UNCERTAINTY
$\geq 100 \mu\text{A}$ to $\leq 1 \text{ mA}$	$2.30 \times 10^{-5} \text{ mA}$
$> 1 \text{ mA}$ to $\leq 10 \text{ mA}$	$2.25 \times 10^{-4} \text{ mA}$
$> 10 \text{ mA}$ to $\leq 100 \text{ mA}$	$3.85 \times 10^{-3} \text{ mA}$
$> 100 \text{ mA}$ to $\leq 1 \text{ A}$	$1.36 \times 10^{-4} \text{ A}$
$> 1 \text{ A}$ to $\leq 3,3 \text{ A}$	$2.20 \times 10^{-3} \text{ A}$
$> 3,3 \text{ A}$ to $\leq 20 \text{ A}$	$1.98 \times 10^{-2} \text{ A}$

## CURRENT (AC)



RANGE	MEASUREMENT UNCERTAINTY
$\geq 10 \mu\text{A}$ to $\leq 100 \text{ mA}$ $\geq 45 \text{ Hz}$ to $\leq 5 \text{ kHz}$	$5.82 \times 10^{-5} \text{ mA}$
$> 100 \text{ mA}$ to $\leq 1 \text{ A}$ $\geq 45 \text{ Hz}$ to $\leq 5 \text{ kHz}$	$1.42 \times 10^{-3} \text{ mA}$
$> 1 \text{ A}$ to $\leq 20 \text{ A}$ $\geq 45 \text{ Hz}$ to $\leq 5 \text{ kHz}$	$1.95 \times 10^{-1} \text{ mA}$

## TEMPERATURE SIMULATION



TYPE	COLOR CODE		RANGE	MEASUREMENT UNCERTAINTY
	ANSI	IEC		
K			-200 to -100 °C -100 to 1000 °C 1000 to 1370 °C	0.36 °C 0.24 °C 0.36 °C
J			-200 to -100 °C -100 to 760 °C 760 to 1200 °C	0.26 °C 0.19 °C 0.26 °C
T			-250 to 150 °C 150 to 400 °C	0.58 °C 0.23 °C
R			0 to 250 °C 250 to 1750 °C	0.80 °C 0.45 °C
S			0 to 1750 °C	0.62 °C
C			0 to 1800 °C 1800 to 2300 °C	0.46 °C 0.74 °C