Technical Specification for MS8221C Series Autorange digital multimeter

Show Hide

DC Voltage

Range	Resolution	Accuracy	Input Impedance	Overload Protection
200mV	0.1mV	±0.7% ±2	10MΩ	
2V	0.001V	±0.7% ±2	10MΩ	200mV range
20V	0.01V	±0.7% ±2	10MΩ	250V DC or AC rms
200V	0.1V	±0.7% ±2	10MΩ	2V to 600V ranges
600V	1V	±0.7% ±2	10MΩ	600V DC or AC rms

Maximum input 600V DC

AC Voltage

Range	Resolution	Accuracy	Input Impedance	Overload Protection
200mV	0.1mV	±0.8% ±3	10MΩ	
2V	0.001V	±0.8% ±3	10MΩ	200mV range
20V	0.01V	±0.8% ±3	10MΩ	250V DC or AC rms
200V	0.1V	±0.8% ±3	10MΩ	2V to 600V ranges
600V	1V	±1.0% ±3	10MΩ	600V DC or AC rms

Maximum input 600AC rms

DC Current

Range	Resolution	Accuracy	Voltage Drop	Overload protection
200μA	0.1μA	±1.2% ±3	20mV	
2000μA	1μA	±1.2% ±3	200mV	200mA/250V fuse
20.00mA	0.01mA	±1.2% ±3	20mV	(quick acting)
200.0mA	0.1mA	±1.2% ±3	200mV	2A, 10A range
2.000A	0.001A	±2.0% ±10	20mV	unfused
10.00A	0.01A	±2.0% ±10	200mV	

AC Current

Range	Resolution	Accuracy	Voltage Drop	Overload Protection
200μA	0.1μA	±1.5% ±5	20mV	
2000μA	1μA	±1.5% ±5	200mV	200mA/250V fuse
20.00mA	0.01mA	±1.5% ±5	20mV	(quick acting)
200.0mA	0.1mA	±1.5% ±5	200mV	2A, 10A range
2.000A	0.001A	±3.0% ±10	20mV	unfused
10.00A	0.01A	±3.0% ±10	200mV	

Resistance

Range	Resolution	Accuracy	Open Voltage	Overload Protection
200Ω	0.1Ω	±1.0% ±3	0.25V	
2kΩ	0.001kΩ	±1.0% ±1	0.25V	
20kΩ	0.01kΩ	±1.0% ±1	0.25V	250V DC
200kΩ	0.1Ω	±1.0% ±1	0.25V	or AC rms
2MΩ	0.001MΩ	±1.0% ±1	0.25V	
20MΩ	0.01MΩ	±1.0% ±5	0.25V	

Temperature

Range	Resolution	Accuracy
–20°C to 0°C	1°C	± 5.0% ±4
0°C to 400°C	1°C	±1.0% ±3
400°C to 1000°C	1°C	± 2.0% ±3
0°F to 50°F	1°F	± 5.0% ±4
50°F to 750°F	1°F	±1.0% ±3
750°F to 1800°F	1°F	± 2.0% ±3

Capacitance

Range	Resolution	Accuracy
20nF	0.01nF	±4.0% ±10
200nF	0.1nF	±4.0% ±3
2μF	0.01μF	±4.0% ±3
20μF	0.1μF	±4.0% ±3
200μF	0.1μF	±4.0% ±3
1000μF	1μF	±4.0% ±3