

GDM-8342 / GDM-8341 Specifications

The specifications apply when the GDM-8342 / GDM-8341 is powered on for at least 30 minutes under +20°C~+30°C.

Function	Range (*2)	Resolution	Input Resistance etc.	Accuracy(*1) 1 Year 23°C±5°C
DC Voltage	500.00 mV	10µV	10MΩ or >10GΩ	0.02 + 4
	5.0000 V	100µV	10MΩ or >10GΩ	0.02 + 4
	50.000 V	1mV	11.11MΩ	0.02 + 4
	500.00 V	10mV	10.1MΩ	0.02 + 4
	1000.0 V	100mV	10MΩ	0.02 + 4
Resistance	500.00 Ω	10mΩ	0.83mA	0.10 + 5 (*3)
	5.0000 kΩ	100mΩ	0.83mA	0.10 + 3 (*3)
	50.000 kΩ	1Ω	83µA	0.10 + 3
	500.00 kΩ	10Ω	8.3µA	0.10 + 3
	5.0000 MΩ	100Ω	830nA	0.10 + 3
	50.000 MΩ	1kΩ	560nA//10 MΩ	0.30 + 3
DC Current	500.00 µA	10nA	0.06V max.	0.05 + 5
	5.0000 mA	100nA	0.6V max.	0.05 + 4
	50.000 mA	1µA	0.14V max.	0.05 + 4
	500.00 mA	10µA	1.4V max.	0.10 + 4
	5.0000 A	100µA	0.5V max.	0.25 + 5
	10.000 A	1mA	0.8V max.	0.25 + 5
Continuity	5000.0 Ω	100mΩ	0.83mA	0.10 + 5
Diode Test	5.0000 V	100µV	0.83mA	0.05 + 5
Capacitance	5.000 nF: 0.5~1nF	0.001nF	8.3µA	2.00 + 20
	5.000 nF: 1~5nF	0.001nF	8.3µA	2.00 + 10
	50.00 nF: 5~10nF	0.01nF	8.3µA	2.00 + 30
	50.00 nF: 10~50nF	0.01nF	8.3µA	2.00 + 10
	500.0 nF	0.1nF	83µA	2.00 + 4
	5.000 µF	1nF	0.56mA	2.00 + 4
	50.00 µF	10nF	0.83mA	2.00 + 4
True RMS Voltage AC (or AC+DC) (*4/*5/*6)	500.00 mV	10µV	30Hz – 50Hz	1.00 + 40
			50Hz – 10kHz	0.50 + 40
			10kHz – 30kHz	2.00 + 60
			30kHz – 100kHz	3.00 + 120
	5.0000 V	100µV	30Hz – 50Hz	1.00 + 20
			50Hz – 10kHz	0.35 + 15
			10kHz – 30kHz	1.00 + 20
			30kHz – 100kHz	3.00 + 50
	50.000 V	1mV	30Hz – 50Hz	1.00 + 20
			50Hz – 10kHz	0.35 + 15
			10kHz – 30kHz	1.00 + 20
			30kHz – 100kHz	3.00 + 50
	500.00 V	10mV	30Hz – 50Hz	-----
			50Hz – 10kHz	0.50 + 15
			10kHz – 30kHz	1.00 + 20
			30kHz – 100kHz	3.00 + 50
750.0 V	100mV	30Hz – 50Hz	-----	
		50Hz – 10kHz	0.50 + 15	
		10kHz – 30kHz	-----	
		30kHz – 100kHz	-----	
True RMS Current	500.00 µA	10nA	30Hz – 50Hz	1.50 + 50

AC (or AC+DC) (*4/*5/*6)			50Hz – 2kHz	0.50 + 40
			2kHz – 5kHz	1.50 + 50
			5kHz – 20kHz	3.00 + 75
	5.0000 mA	100nA	30Hz – 50Hz	1.50 + 40
			50Hz – 2kHz	0.50 + 20
			2kHz – 5kHz	1.50 + 40
			5kHz – 20kHz	3.00 + 60
	50.000 mA	1µA	30Hz – 50Hz	1.50 + 40
			50Hz – 2kHz	0.50 + 20
			2kHz – 5kHz	1.50 + 40
			5kHz – 20kHz	3.00 + 60
	500.00 mA	10µA	30Hz – 50Hz	1.50 + 40
			50Hz – 2kHz	0.50 + 20
			2kHz – 5kHz	1.50 + 40
			5kHz – 20kHz	3.00 + 60
5.0000 A	100µA	30Hz – 50Hz	2.00 + 40	
		50Hz – 2kHz	0.50 + 30	
		30Hz – 50Hz	2.00 + 40	
10.000 A	1mA	50Hz – 2kHz	0.50 + 30	
Frequency	10Hz – 500Hz			0.01 + 5
	500Hz – 500kHz	-----	-----	0.01 + 3
	500kHz – 1MHz			0.01 + 5
Temperature (*7) (Thermocouple)	-200 °C ~ +300 °C	0.1 °C	J / T / K	2 °C (typical)
Display	VFD, Tow Colors Display			
Interface	USB Device, USB Host (for GDM-8342 only), GPIB (optional for GDM-8342 only)			
Power Source	AC 100 V / 120 V / 220 V / 240 V ±10%, 50-60Hz			
Power Consumption	Max. 15VA			
Dimensions	265(W) x 107(H) x 302(D) mm			
Weight	Approx. 2.9kg without option			

1. Accuracy = +/- (% of reading + digits)
2. 2% overrange on all ranges, except 10A is 20% overrange
3. REL function is on
4. The AC+DC is in AC coupled
5. The accuracy of AC+DC is equal to AC with 10 more digits added
6. AC characteristics are for sinewave input > 5% of range
7. Specifications do not include probe accuracy