



G100 Handheld Gaussmeter



Description:

The best handheld Gaussmeter G100 is ergonomically designed and manufactured by Coliy. Customers use G100 Gaussmeter in various magnetic field measurements and applications. The G100 handheld Gaussmeter can be used in academic, laboratory, industrial, manufacturing, and various applications. The 3.2 inches color LCD simultaneously displays kinds of data for customers. Such as, Min./Max./Peak Hold, magnetic flux intensity, frequency, and trend graph, etc. With a Hall Probe, which has a Temperature coefficient $<0.03\%/^{\circ}\text{C}$ and an active area of 0.15mm diameter; The G100 Gaussmeter can measure up to 100KG. The Frequency range of G100 Gaussmeter is from DC to 30KHz. The G100 Gaussmeter owns huge memory capacity to store massive amounts of data. Friendly Keypad functions allow user to watch

and store data; and upload data to computer for analysis. Simultaneously, the G100 Gaussmeter can connect with 3 probes. The cable of Probe can be extended to 100 meters. In the future, Coliy will implement “Wireless Probe” .

Not only the multi-probes connections function, G100 Gaussmeter can operate with a variety of probes. Such as Axial Probe, Transverse Probe, High Temp. (up to 155 Celsius) Probe, Ultrathin Probe, Low field Probe, and 3-axis probe etc. Every Probe offers a function of reminder. This function reminds customers the next calibration date to guarantee the accuracy of G100. Probe can store 3000 units of data. All the data will be stored eternally.

Basic Features

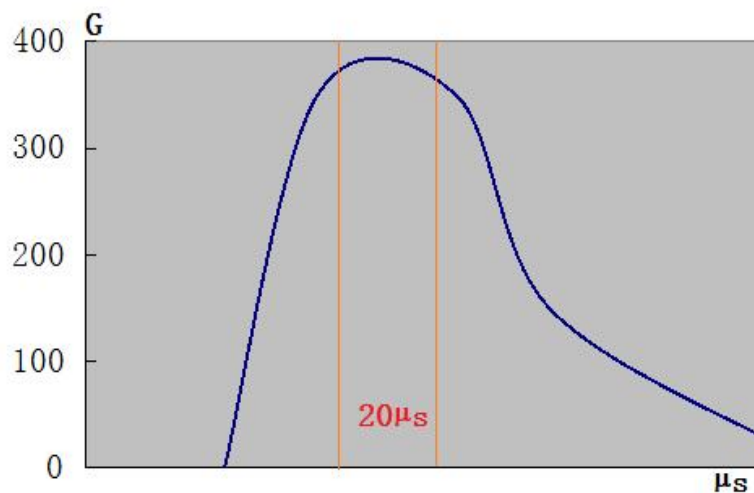
- Ergonomically designed
- 3.2 inches color LCD 320x240 pixel
- Basic accuracy 0.8% of reading (25 °C)
- 3V Analog Output , USB port.
- Display trend graph & measured data
- Data recording (Auto/manual)
- Max/Min/Peak Hold Function
- Multi-Probe connection
- Calibration reminder function.
- Probe-model auto-identify
- Flash memory storage.
- Water Proof and Dirt Resistant
- Battery life 15 hrs (continuous operation)
- Fixed bolster for main unit and probes
- SMART PC software
- Next calibration date reminder
- Auto zero
- Auto calibration of main unit

Probe Features

- High performance instrumentation grade GaAs Hall Sensor
- Temperature Coefficient <0.03%/°C
- Plug and play
- Max cable lengths 100m (325 ft)
- Memory capacity of 3000 units
- Hall Probe active area 0.15mm
- High temperature probe (to +155° C)
- 0.4mm(0.016”) Ultrathin probe
- Low field probe resolution of 10μG
- To display vector value and x, y, z component by applying a three axis probe.
- Hall Probe frequency DC to 30KHz

Coliy Accuracy Guaranty :

- a) The accuracy acquisition is applied with all Hall probe.
- b) All calibration of Coliy products operated at 25° C. For higher accuracy, Coliy suggests to buy higher performance Coliy Gaussmeter or Probe that offer the temperature correction function.
- c) Coliy plays the leading role in Gaussmeter market. Coliy Gaussmeter performs the best accuracy at % of reading, but not accuracy at % of range.



20μs Sampling Peak Mode:

With a high speed 1MHz AD sampling , the G100 Gaussmeter is capable of capturing the Peak measurements of a pulsed magnetic field and the fast variation of magnetic field as narrow as 20μS in width.

SMART Software



The G100 Gaussmeter computer software can automatically record all the data of various measurements and display the information in graphic chart.

Multi-Probe Application



The G100 Smart software can easily identify the model of each probe and the total number of being attached probes. The magnetic field measurement from each probe will be stored and graphically displayed individually.

Specification

Range	Up to 100KG Auto range (varies according to different probe)
Best resolution	0.01mG (low field magnetic probe) 0.1G (General magnetic probe)
Accuracy	Typical $\pm 0.8\%$ of reading DC Typical $\pm 2\%$ of reading AC (based on probe Selection)
Frequency range	DC - 30KHz (varies according to different probe)
Analog output	$\pm 3V$
Temperature coefficient	$\pm (0.03\% \pm 1 \text{ count}) / ^\circ C$
Capture field pulses time width	20 μs
Operating temp	-10 $^\circ C$ to +60 $^\circ C$
Storage temp	20 $^\circ C$ to +70 $^\circ C$
Display	3.2 inches colorful LCD, 320x240 Pixel.
Communication port	USB
Operating battery life	15 hrs
Dimension	238mm x 95mm x 42mm 9.4" x 3.75" x 1.65"
Weight	350g 0.81lbs
Battery	Rechargeable 4000mAH Li-ion



Display of single probe

Color LCD shows: probe model, serials number, time, value and time domain oscillograph, also Max, Min and Peak value by switches on the keypad.



Display of multi-probes

Color LCD displays each probe model and serial number and value.

Display between multi-probe and single probe can be switched.



Display of 3-axis probe measuring

By connecting a Three Axis Probe the unit will display the components of x, y, z and the vector value. Max, Min and Peak values will be shown by switches on the keypad.



Probe and bracket

Cross section of the probe is only 2.5mm*1mm, which is allowed to insert into a very small gap. The 180° rotational bracket can attach the probe on smooth surface.



Main unit and bracket

Gaussmeter: Ergonomically designed, Large color LCD, 9 key membrane keypad and adjustable bracket



High temperature probe

Operating temperature range is -10°C to $+155^{\circ}\text{C}$

Measurement of Magnetic Field in high

temperature applications such as motor core.



THREE PROBE MULTIPLEXER

This option allows the user to connect

up to three probes simultaneously.



ZERO CHAMBER

provides up to 80 db
attenuation in fields up to 500 G
and can be used with standard
probes. Hole size: diameter
6.8mm x 44.5mm

Probes and Accessories

Standard metal package probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Transverse T08M150G1 T08M150GIT	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*2.5*1	-10°C - +75°C	0.8%	METAL
Axial A08M150G1 A08M150GIT	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*Φ5	-10°C - +75°C	0.8%	METAL

Standard plastic package probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Transverse T08P150G1 T08P150GIT	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*2.5*1	-10°C - +75°C	0.8%	PLASTIC
Axial A08P150G1 A08P150GIT	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*Φ5	-10°C - +75°C	0.8%	PLASTIC

Wide Filed probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Transverse T08W150G1 T08W150GIT	Range 0-100KG, Resolution 0.1G	DC-30KHz	80*2.5*1	-10°C - +75°C	0.8%	METAL
Axial A08W150G1 A08W150GIT	Range 0-100KG, Resolution 0.1G	DC-30KHz	80*Φ5	-10°C - +75°C	0.8%	METAL

ULTRATHIN probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
T08U150G1 T08U150G1T	Range 0-30KG, Resolution 0.1G	DC-30KHz	60*2.0*0.4	-10°C - +75°C	0.8%	PLASTIC

HIGH TEMPERATURE PROBE						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Transverse T25H150G1 T25H150G1T	Range 0-30KG, Resolution 0.1G	DC-30KHz	250*2.5*1	-10°C - +155°C	0.8%	METAL
Axial A25H150G1 A25H150G1T	Range 0-30KG, Resolution 0.1G	DC-30KHz	250 * Φ 5	-10°C - +155°C	0.8%	METAL

CRYOGENIC probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Transverse T25C150G1 T25C150G1T	Range 0-100KG, Resolution 0.1G	DC-30KHz	250*2.5*1	5K - 350K	2%	METAL
Axial A25C150G1 A25C150G1T	Range 0-100KG, Resolution 0.1G	DC-30KHz	250 * Φ 5	5K - 350K	2%	METAL

Low field probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Fluxgate A07LF150G1	Range 0-1G, resolution 10 μ G Bartington sensor	DC-1KHz	70*30*32	-40°C - +75°C	0.5%	PLASTIC
Magnetoresistance A06LM150G1 A06LM150G1T	Range 0-6G, resolution 100 μ G	DC-1MHz	60*10*2.5	-10°C - +75°C	1%	PLASTIC

Standard 3-axis probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Y08M150G1 Y08M150GIT	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*Φ5	-10°C - +75°C	0.8%	METAL

3-axis Low field probe						
Model	Range & Resolution	Frequency	dimension mm	Working temp.	linearity	Probe material
Fluxgate Y07LF150G1	Range 0-1G, resolution 10μG Bartington sensor	DC-1KHz	70*30*32	-40°C - +75°C	0.5%	PLASTIC
Magneto-resistance Y06L150G1 Y06L150GIT	Range 0-6G, resolution 100μG	DC-1MHz	60*10*2.5	-10°C - +75°C	0.8%	PLASTIC

- Customized length is available upon requirement
- T: TEMPERATURE COMPENSATION

Accessories

model	Descriptions
ZC10	Zero chamber , provides up to 80 db attenuation in fields up to 500 G and can be used with standard probes. Hole size: diameter 6.8mm x 44.5mm
PS2000	Power adaptor. Input:100-230VDAC, Output:5VDC
MULT3	3 channel MULTIPLEXER , up to 3 probes. which allows three probes connection.
STD20	Bracket for main unit and probe
CAB20	Customized low impedance USB cable for communication and power connection.
CAB30	BNC adapting cable
CAB8-XX	Extend cable optional from 3 to 100 meter. The basic length is 3 meters. XX stands for length with unit "meter" .

Gaussmeter Package Information

Description	Order No.
G100 main unit, Transverse Probe T08M150G1, power adaptor, USB cable, Carrying case, CD (Manual only)	G100101
G100 main unit, Transverse Probe T08M150G1, power adaptor, USB cable, BNC adapting cable, professional probe bracket, Zero Chamber , Carrying case, CD (Manual and SMART software)	G100102
G100 main unit, axial Probe A08M150G1, power adaptor, USB cable, Carrying case, CD (Manual only)	G100201
G100 main unit, axial Probe A08M150G1, power adaptor, USB cable, BNC adapting cable, professional probe bracket, Zero chamber , Carrying case, CD (Manual and SMART software)	G100202
G100 main unit, 3pcs Transverse Probes T08M150G1, 3 channel MULTIPLEXER, power adaptor, USB cable, Carrying case, CD (Manual only)	G100103
G100 main unit, 3pcs Transverse Probes T08M150G1, 3 channel MULTIPLEXER, power adaptor, Zero chamber , USB cable, BNC adapting cable, 3pcs professional probe brackets, 2pcs Carrying cases, CD (Manual and SMART software)	G100104

Description of probe type selection

T	06	M	150	G3	T
PROBE TYPE	STEM LENGTH	PROBE STYLE	CABLE LENGTH	GAUSSMETER MODEL	TEMPERATURE COMPENSATED
A - AXIAL		C - CRYOGENIC			
T - TRANSVERSE	06 - 6 cm	F - FLEXIBLE	150 - 150cm	G1 - G100	T - YES
X - 2 AXIS	08 - 8 cm	H- HIGH TEMP.	500 - 500cm	G2 - G200	BLANK - NO
Y - 3 AXIS	10 - 10 cm	L - LOW FIELD	...	G3 - G300	
	25 - 25 cm	M - METAL		G4 - G400	
	50 - 50 cm	P- PLASTIC			
	100-100 cm	U - ULTRATHIN			
	...	W - WIDE FIELD			



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.