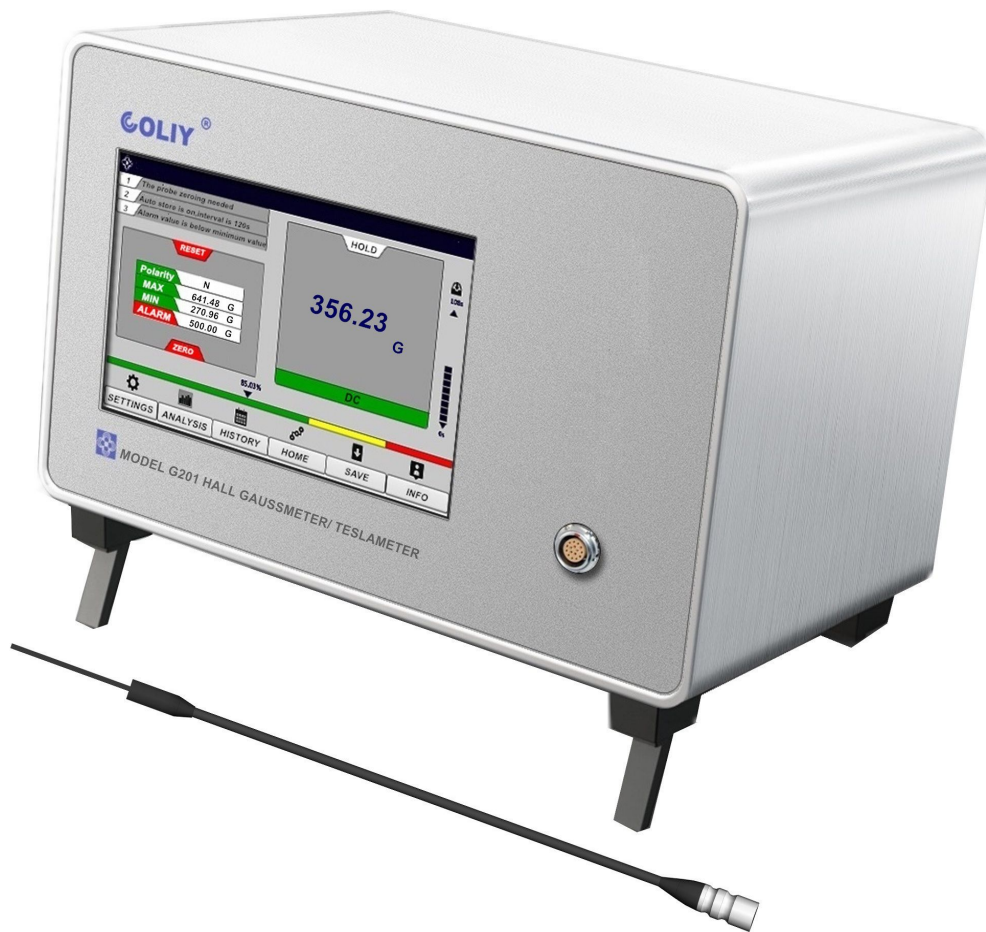


G201 Desktop Gaussmeter



Description:

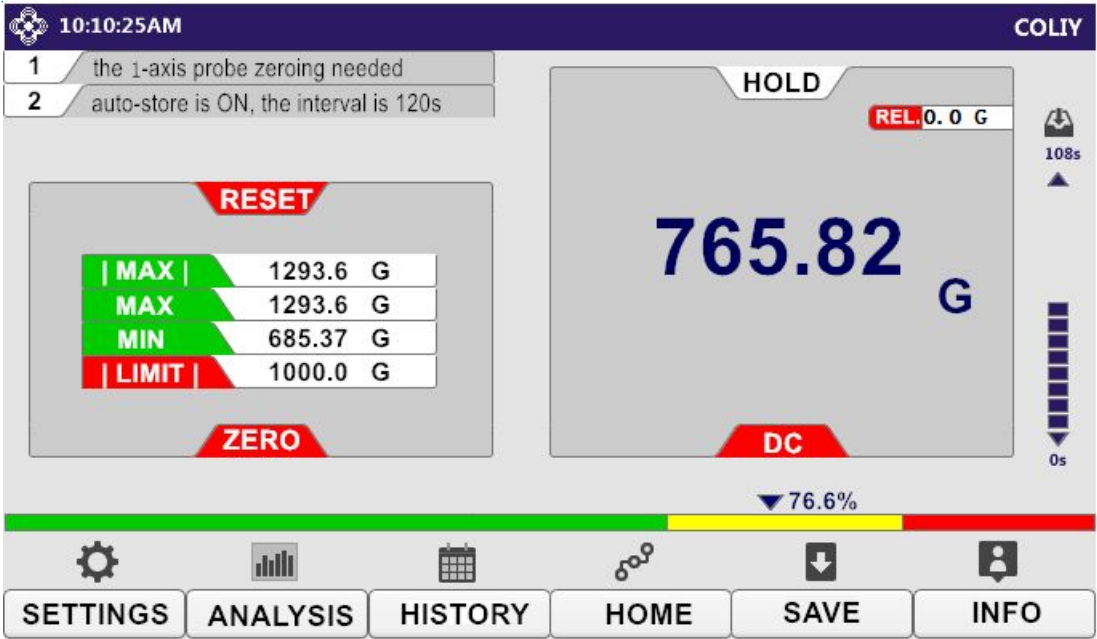
COLIY Model G201 desktop hall gaussmeter provides advanced functionality and performance to meet the demanding needs of the industry and G201 is suitable for scientific research institutions, universities, laboratories, industry, manufacturing and other users. G201 Gaussmeter boasts with an industrial class 7 inches touch panel display that enables customers' instantaneous and simultaneous measurement results (Max/ Min/ Peak/ Hold/ Alarm/ Polarity, Magnetic Flux Intensity, and a Trend Graph etc.).

Gaussmeter G201 allows measurements up to 100KG(10T) with the reading-based accuracy of 0.25%, the resolution of 0.01G(1 μ T), and the frequency response of DC~20KHz. The temperature coefficient of ordinary probes (probes without temperature sensor) is 300ppm/°C, but temperature sensor-contained probes(probes with built-in temperature sensor) have the function of temperature compensation, so temperature sensor-contained probes are strongly recommended for better precision and stability when the temperature changes. G201 could be equipped with different kinds of Hall Probes: Axial Probe, Transverse Probe, Flexible Probe, High-range Probe(10T), High Temp. Probe (up to 160°C), Ultra-thin Probe (thickness of 0.5mm) and Temperature sensor-contained Probe.

Features	
<ul style="list-style-type: none">● Ergonomically designed● Colorful display style● GUI Operation System● 7 inches color touch LCD● Max/Min/Hold Function● Display trend graph & Alarm● S or N Polar indication● Smart record and review● 20μs Sampling Peak Mode available	<ul style="list-style-type: none">● Measurement range up to 100KG(10T)● Best resolution up to 0.01G(1μT)● Full 5 display digits● Accuracy : 0.25% of reading● Frequency response DC- 20KHz● High Temp. Probe (up to 160°C)● Ultra-thin Probe (thickness of 0.5mm)● High-range Probe(10T)● Optional probes with temperature compensation function

GUI Operation System & Display Style

With the revolutionary operating system (GUI Operation System) developed by COLIY, operators can choose menu by touching, to operate gaussmeter and experience the extreme outstanding performance of COLIY GUI Operation System. Color LCD shows magnificent data: time, value, polarity, Max, Min, note, Alarm, trend graph.

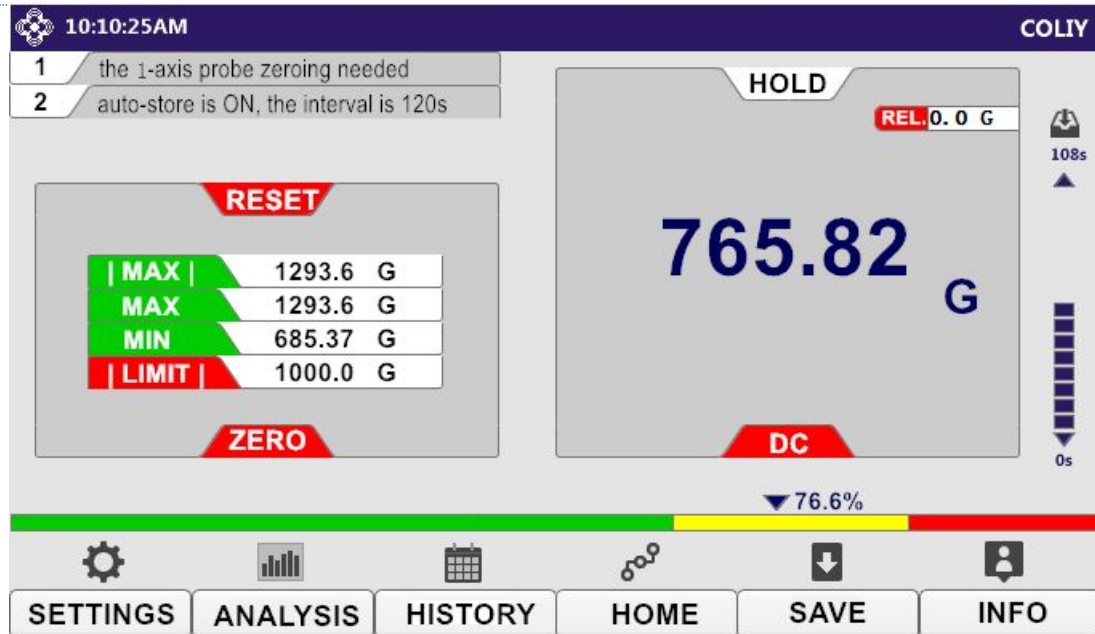


Smart Record And Review

Detailed record list, operators can use MEMO to memorize any specification of every measurement.

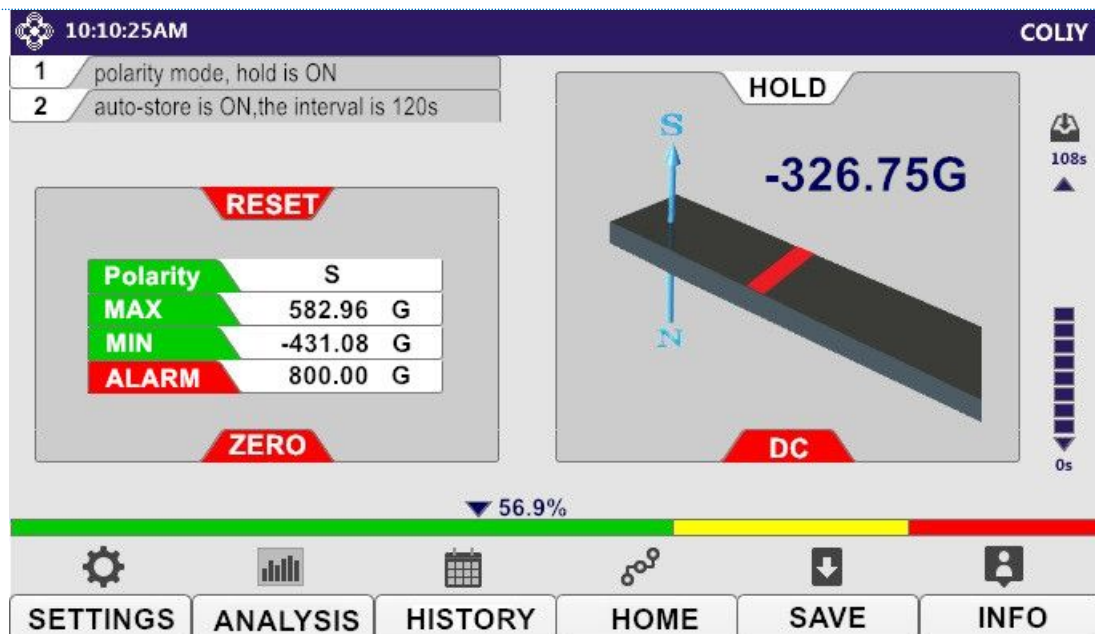
Click any record list, operators can review all the information recorded as screen shots and add note to every item.

There is a unique feature of COLIY GUI Operation System.



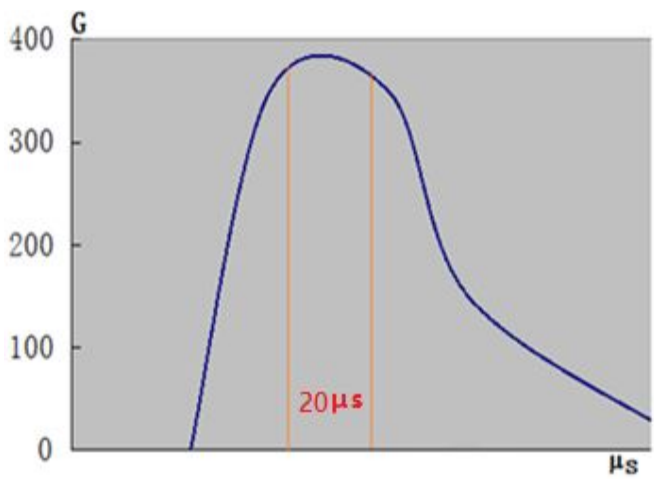
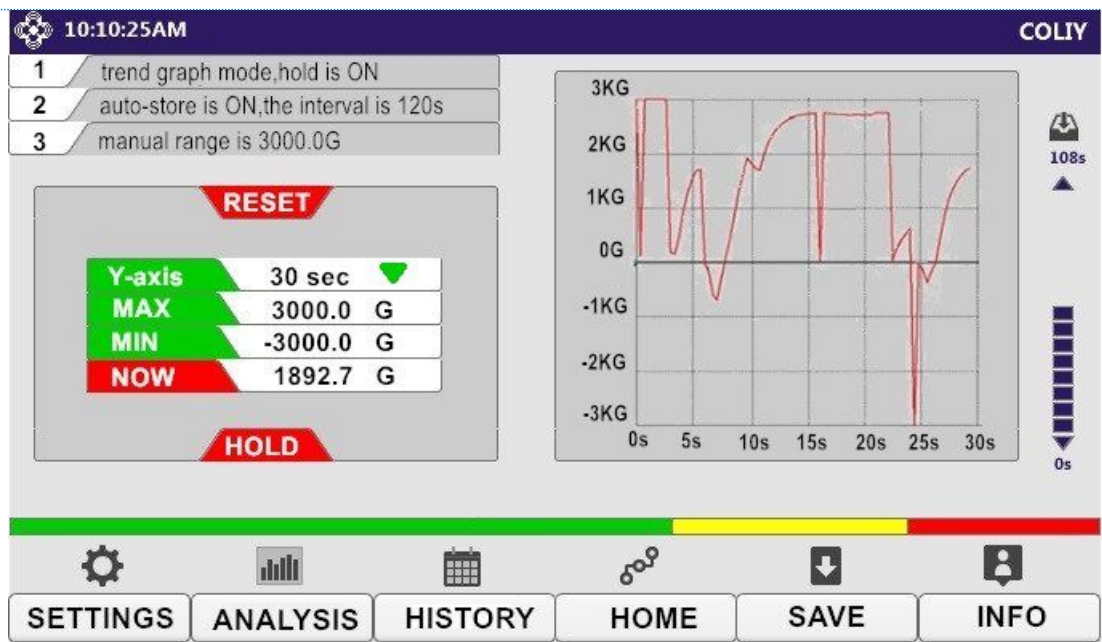
Magnetic Pole Direction

G201 could show the clear polar indication by a colorful and dynamic cartoon picture. Picture in the following is adopted from Polar Mode displayed in the LCD screen during operation.



Graph Mode

Users can see the magnetic field change in real time, real-time magnetic field intensity, recording interval, maximum, minimum, and other notes.



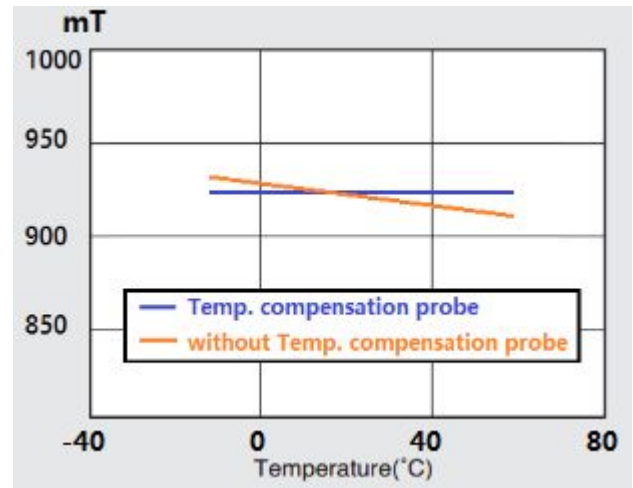
20µs Sampling Peak Mode

Gaussmeter G201P is able to capture the short pulse magnetic field and the peak value of magnetic field intensity in rapidly changing magnetic field as narrow as up to 20 µs in width.

(The function is an option.)

Temperature Compensation

The temperature coefficient of ordinary probes (probes without temperature sensor) is 300ppm/°C, but temperature sensor-contained probes (probes with built-in temperature sensor) have the function of temperature compensation, so temperature sensor-contained probes are strongly recommended for better precision and stability when the temperature changes.

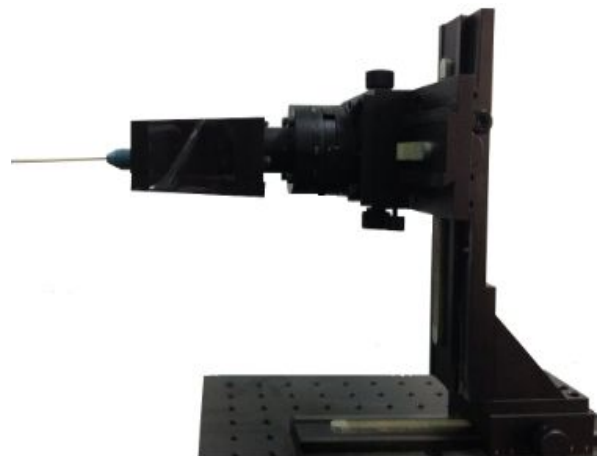


High Temp. Probe

With the advanced sensor technology and excellent design, high temp. probe, made by COLIY, has a unique working temperature: -20°C to +160°C (-4°F to +320°F)

3D Movement Platform

3-Direction Precision Movement Platform, is made of non-magnetic material. Users fixed the probe on the bracket front-end, and then manually rotate the knob so that the probe moves stably along the X, Y, Z-axis to a certain position and lock fixed. Maximum stroke of each axis is 150mm, and positioning accuracy is 0.1mm.





ZERO CHAMBER

Provides up to 80 dB attenuation in fields up to 500 G, it could also be used to the zero calibration of standard probes.

Internal dimension of the Chamber:
diameter 6.8mm x 44.5mm

SMART PC Software

SMART computer software has rich features: Automatically record and display trend graph; Display the magnetic flux density, maximum and minimum in real time; Export saved data from the gaussmeter host; Record and save measurement data in real time.



Metal Protector of Probe

All COLIY gaussmeters' probes have metal protectors(protective sleeves), and metal protector could be tightened with probe grip, to protect probes from impact, compression and other damage. It is strongly recommended when finished the magnetic field measurements, users should tighten the protector.

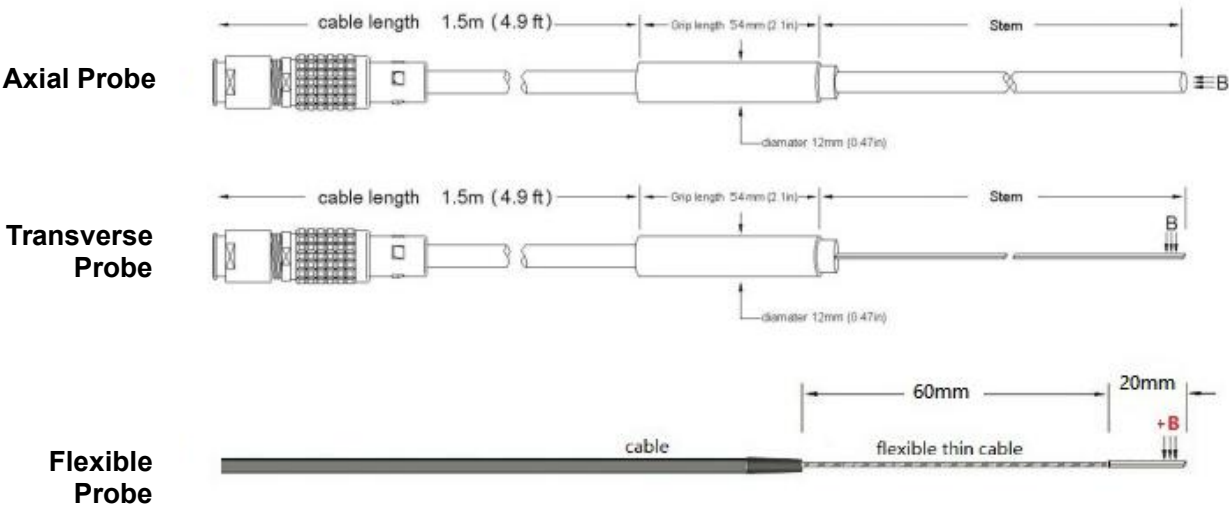


G201 Gaussmeter Specification:

Model		G201
Measurement Specification		
Accuracy(DC)		DC: 0.25% of reading ± 0.05% of the selected range
Range		30KG(3T) (manual range: ±300G, ±3KG, ±30KG) OR 100KG(10T) (manual range: ±1KG, ±10KG, ±100KG)
Best Resolution		0.01G(1μT)
Display Digits		5
Display Resolution	Display range 0~ 999.99G	0.01G(1μT)
	1,000.0G~ 9,999.9G	0.1G(0.01mT)
	10,000~ 99,999G	1G(0.1mT)
Frequency Response [f _r]	DC - 20KHz	
Typical Temperature Coefficient		<±300ppm/°C (Regular probe) <±80ppm/°C (Probe with temperature sensor)
Zero Drift		<±0.12G/ 8 hours
Minimum Magnitudes for Rated AC Accuracy		3% of the selected range
Long-term Instability		<±0.05% of reading (>1KG, Within 8 hours, 25°C)
MAX/ MIN Acquisition Time(DC)		10ms (G201P is able to capture the peak value of magnetic field intensity in rapidly changing magnetic field as narrow as up to 20 μs in width.)
Front Panel		
Screen		7 inches colorful tough LCD,320 x 240 Pixel
Units		Gauss(G), Tesla(T), Amperes per meter (A/m)
Display Update Rate		3 readings/second
Display Mode		DC, AC, MAX., MIN, Alarm, Polarity Indication, Trend Graph etc.
Panel Feature		Color resistive touch screen
Probe		
Probes		Transverse Probe, Axial Probe, Ultra-thin Probe, High-range Probe, High Temp. Probe, Flexible Probe, Temperature sensor-contained Probe
USB Interface		
Function		To connect PC with gaussmeter host for monitoring the measurement
Data Update Rate		MAX. 30 Sample/s
Software/ Driver		SMART PC Software without any driver
Analog Output		
Function		Real-time analog voltages output: these are high-level differential voltages proportional with the magnetic flux density
Range		±10 V
Proportion		10 V proportional with the selected range

Frequency Response	DC to 20KHz
Output Resistance	< 100 Ω (short circuit protected)
Connection	BNC adapting cable for analog output
Host Specification	
Ambient Temperature	+15°C to +35°C (Rated Accuracy) -10°C to +60°C (Reduced accuracy)
Storage Temperature	- 20°C to +75°C
Ambient Magnetic Field	<100 G DC
Power Supply	100 - 240 VAC, 50 - 60 Hz, 40 VA
Dimension	213 mm W × 133 mm H × 240 mm D
Weight	2.5 kg
Certification	CE Certification, EMC Certification

Probe Specification



Model G201 Gaussmeter Probes							
Probe Model	Range	Best Resolution	Frequency Response	Stem dimension (mm)	Working temp. (°C)	DC Accuracy (Based on reading at 25°C)	Stem material
Transverse T08P150G201 T08P150G201T	30KG (3T)	0.01G (1μT)	DC-20KHz	80*4.5*1	-20 - +75	0.25%	Plastic
Transverse T08M150G201 T08M150G201T	30KG (3T)	0.01G (1μT)	DC-20KHz	80*4.5*1.1	-20°C - +75°C	0.25%	Copper

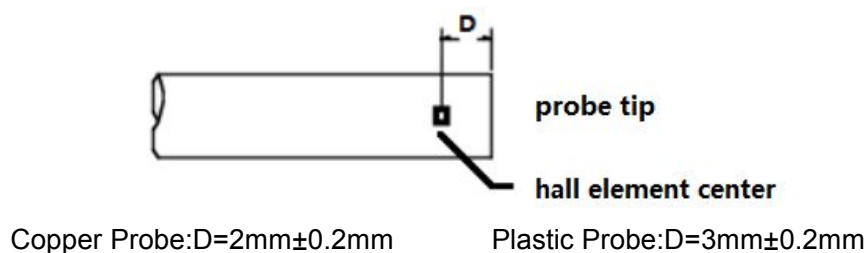
High-range Transverse T08W150G201 T08W150G201T	100KG (10T)	0.01G (1 μ T)	DC-20KHz	80*4.5*1	-20℃ - +75℃	0.25%	Plastic
High Temp. Transverse T40H150G201 T40H150G201T	30KG (3T)	0.01G (1 μ T)	DC-20KHz	400*4.5*1.1	-20℃ - +160℃ (-4°F - +320°F)	0.25%	Copper
Axial A08M150G201 A08M150G201T	30KG (3T)	0.01G (1 μ T)	DC-20KHz	80* Φ 5	-20℃ - +75℃	0.25%	Copper
High-range Axial A08W150G201 A08W150G201T	100KG (10T)	0.01G (1 μ T)	DC-20KHz	80* Φ 5	-20℃ - +75℃	0.25%	Copper
Flexible T08F150G201 T08F150G201T	30KG (3T)	0.01G (1 μ T)	DC-20KHz	20*4.5*1 (Connected with 60mm flexible cable)	-20℃ - +75℃	0.25%	Plastic
0.5mm Ultra-thin T06U150G201 T06U150G201T	30KG (3T)	0.01G (1 μ T)	DC-10KHz	60*4.5*0.5	-20℃ - +75℃	0.5%	Plastic

Note:

1, Option “T” : Temperature sensor contained Probe, has the function of temperature compensation, and the temperature coefficient is $\leq \pm 80 \text{ppm}/^\circ\text{C}$;

2, Each probe's fully calibrated measurement range: $\leq \pm 20 \text{KG} (\pm 2 \text{T})$;

The position of sensor center(Transverse Probe)



Optional 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. Internal dimension of the Chamber: diameter 6.8mm x 44.5mm
SAMRT PC Software	PC SOFTWARE for Gaussmeter
GHOLD100	3-Direction Precision Movement Platform, is made of non-magnetic material. Users fixed the probe on the bracket front-end, and then manually rotate the knob so that the probe moves stably along the X, Y, Z-axis to a certain position and lock fixed. Maximum stroke of each axis is 150mm, positioning accuracy of 0.1mm; center load: 10kg; weight: 3.5kg

The most popular Package
ORDER G20101: Gaussmeter G201 + Probe T08P150G201 + Zero Chamber ZC10

Description Of Probe Type Selection

T	08	M	150	G201	T
PROBE TYPE	STEM LENGTH	PROBE STYLE	CABLE LENGTH	GAUSSMETER MODEL	TEMPERATURE COMPENSATED
A - AXIAL	06 - 6 cm	C - CRYOGENIC	150 - 150cm	G201 - G201	T - YES
T - TRANSVERSE	08 - 8 cm	F - FLEXIBLE	...	probe	BLANK - NO
X - 2 AXIS	10 - 10 cm	H - HIGH TEMP.		G203 - G203	
Y - 3 AXIS	25 - 25 cm	L - LOW FIELD		probe	
	...	M - METAL			
		P - Plastic			
		U - ULTRATHIN			
		W - WIDE FIELD			

Precision Description Of COLIY Gaussmeter

- When using gaussmeter to measure magnetic field in the environment that ambient temperature changes obviously, it's recommended to use temperature sensor contained probe with the gaussmeter. Temperature sensor contained probe has the function of temperature compensation for better precision and stability when the temperature changes.
- Difference of rated accuracy between COLIY Gaussmeter and other brand's Gaussmeter: the accuracy of COLIY is based on the reading, but other brand's Gaussmeter' accuracy is based on the selected range. So COLIY Gaussmeter's measurement data is more accurate than other brand's Gaussmeter' when all the Gaussmeter' accuracy is in a same value, and all the Gaussmeter work under the same working conditions. For example: When using COLIY gaussmeter and other brand gaussmeter, whose rated accuracy is 1%, to detect a magnetic field at 500G, COLIY gaussmeter readings range is $500\text{G} \pm 500 * 1\%$, but other brand's gaussmeter readings range is $500\text{G} \pm 3000 * 1\%$, (3000G is the most appropriate range in such condition).

Compare With Competitors

COLIY has an advantage	COLIY MODEL G201	FWBELL MODEL 6010
Accuracy(DC)	0.25%	0.25%
Display screen	7" Color touch LCD	Black and white LCD
Display Digits	5 (example:56789G)	3 ^{3/4} (example:5.68KG)
Temperature coefficient	300ppm/°C	500ppm/°C
Probe protector	Metal	Brittle Plastic
Operation System	GUI	Button Control
Polar indication	YES	NO
High Temp. Probe($\leq 160^{\circ}\text{C}$)	YES	NO
High range probe(10T)	YES	NO
Smart record and review	YES	NO
Trend Graph display	YES	NO

COLIY- Excellent Solution for Magnetic Field Measurement



Model	Sensor	Type	Axis	Accuracy Based on reading	MAX Range	Best Resolution
Gaussmeters for High Magnetic Field(0-10T)						
G91	Hall	Handheld	1	2.0%	2T	10μT
G92	Hall	Handheld	1	1.0%	10T	10μT
G93 (with probe Y08P150G93)	Hall	Handheld	3	1.0%	3T	1μT
G201	Hall	Desktop	1	0.25%	10T	1μT
G203	Hall	Desktop	3	0.25%	3T	1μT
G401*	Hall	Desktop	1	0.05%	10T	0.1μT
G403*	Hall	Desktop	3	0.05%	3T	0.1μT
G501*	Hall	Desktop	1	0.01%	3T	0.1μT
GSP301	Hall	Digital Transmitter	1	1%, 0.5%, 0.25%,0.05%*	10T	0.1μT
GSP303	Hall	Digital Transmitter	3	1%, 0.5%, 0.25%*,0.05%*	3T	0.1μT
Gaussmeters for Low Magnetic Field(0- 4.5mT)						
GMR50	GMR	Handheld	1	1.0%	4.5mT	10nT
G93 (with probe Y08L150G93)	GMR	Handheld	3	1.0%	1mT	10nT
GF601	Fluxgate	Handheld	1	0.5%	1mT	1nT
GF603	Fluxgate	Handheld	3	0.5%	1mT	1nT
GF803*	Fluxgate	Desktop	3	0.1%	1mT	0.1nT
GFP703	Fluxgate	Digital Transmitter	3	0.5%	1mT	1nT
GFP903*	Fluxgate	Digital Transmitter	3	0.1%	1mT	0.1nT
Magnetic Field Measurement System						
GAS3000	Probe Array of Magnetic Field Detection System: can be used to simultaneously monitor 2- 128 points of magnetic field					
Gaussmeter Calibration System	DC Magnetic Field (Accuracy up to 50ppm)			AC Magnetic Field (Accuracy up to 0.1%)		
	• Low Range: 0.1nT- 0.1mT • Middle Range: 0.1- 100mT • High Range: 1mT- 2T			• Low Range: 0.1μT- 0.1mT • Middle Range: 0.01- 15mT • High Range: 0.1- 200mT		
AC Magnetic Field Sensor						
AMS-2K	Range of 3mT; Frequency response 25Hz- 2kHz					
AMS-1M	Range of 3mT; Frequency response 2kHz- 1MHz					

Note: 1T= 10KG; 1mT= 10G; 1μT= 10mG; 1nT= 10μG; “*” : coming soon without notice.