

## G90 Series Handheld Hall Gaussmeter



Professional gaussmeter  
with UI operating system

### Description:

The G90 series Handheld Hall Effect Gaussmeters are Coliy Tech's latest generation of Handheld Gaussmeters. The product line consists of three user friendly models: Model G91(2% accuracy), Model G92(1% accuracy), and the Model G93(3-axis,1% accuracy). G92 Gaussmeter can be configured for three channels with the use of an optional MULTIPLEXER to connect three probes. A revolutionary state of the art operating system provides the user Smartphone interface, with easy step by step operating instructions via the exclusive COLIY UI system.

The G90 series Handheld Hall Effect Gaussmeters are designed for academic, laboratory, industrial, manufacturing applications. Years of experience, Coliy has a proven track record for quality easy to use instrumentation controls from traditional keypad, computer and now smart phone programming. The G90 series boasts with a industrial class 3.2 inches touch panel display that enables customers instantaneous and simultaneous measurement results. (Min./Max./ Peak/Hold, Magnetic Flux Intensity, and a Trend Graph, etc). The G90 Hall Effect Gaussmeter can measure up to 30KG from DC to 30KHz. The models G92 and G93 are supplied with temperature compensation function, providing precision and stability from -20°C to 75°C (-4°F to 167°F). Temperature coefficient of single axis Hall probe is 300ppm/°C, temperature coefficient of 3-axis Hall probe is 600ppm/°C. We strongly recommend buying

temperature compensated Hall probes, for the best precision and stability when the temperature changes.

Users can select from a complete selection Hall Probes : Axial Probe, Transverse Probe, Three-Axis Probe, High Temp. Probe (up to 160°C), Ultra thin Probe (0.5mm thickness). Our Three-Axis Hall Sensor developed by MEMS technology provides high spatial resolution ( $0.1 \times 0.1 \times 0.1 \text{ mm}^3$ ) and superior orthogonality precision (better than  $0.05^\circ$ ), suitable for institutes, Universities and high tech. enterprises.

## Features

- Ergonomically designed
- Colorful display style
- Smartphone operation
- 3.2 inches color touch LCD
- Display trend graph & measured data
- Max/Min/Hold Function
- Frequency bandwidth DC to 30KHz
- Temperature compensation
- Water Proof and Dirt Resistant
- Battery life 12 hours operation
- S or N Polar indication
- Transverse and Axial probe
- Extremely small volume 3-axis sensor
- High Temp. Probe (up to 160 Celsius)
- Ultrathin Probe (0.5mm thickness).
- 20 $\mu$ s Sampling Peak Mode
- Smart record and review
- Multi-probe function

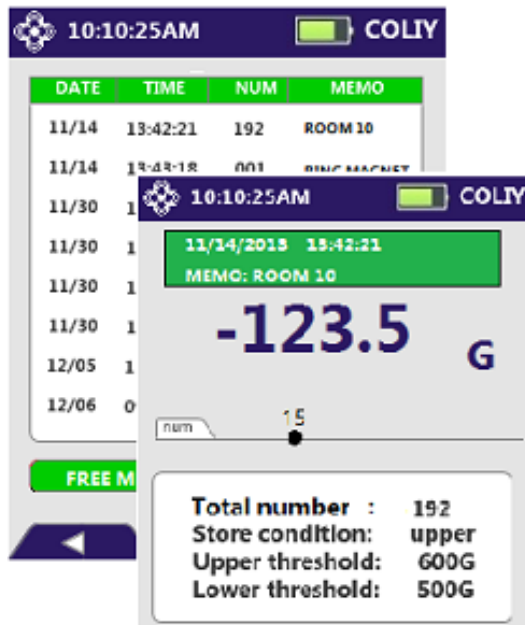
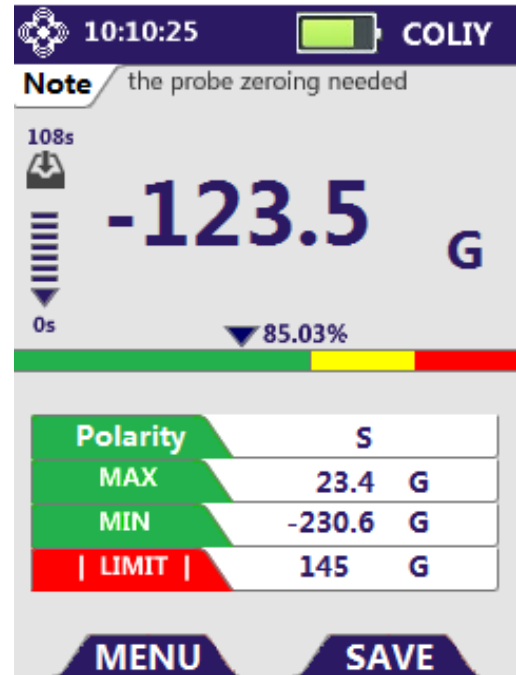


## SMARTPHONE Operation

A revolutionary operating system is developed by Coliy. Customers will operate G90 units using a Smartphone interface. This is extreme experience by COLIY UI system.

## Display Style

Color LCD shows magnificent data: time, value, polarity, Max, Min, note, Stick figure....  
This is extreme experience by COLIY UI system.

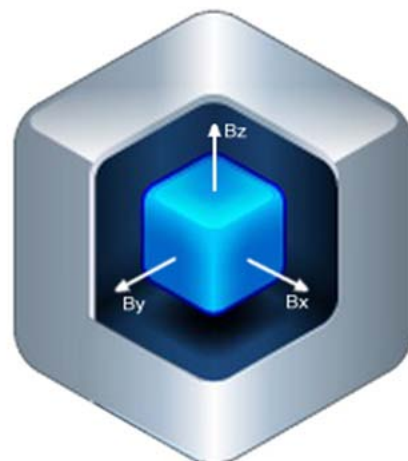


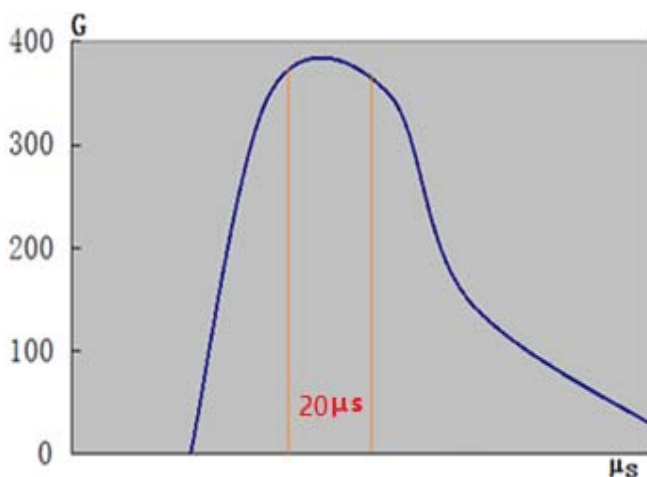
## Smart record and review

This function provides the full size record list, Users can use MEMO to memorize any specification at every measurement.  
Click any record list, users can select screen shots.  
This is extreme experience by COLIY UI system.

## Unique Three-Axis Sensor

The Three-Axis sensor using particular MEMS technology, it has minimal spatial resolution. Three mutually orthogonal magnetic field sensitive volume only  $0.1 \times 0.1 \times 0.1 \text{ mm}^3$  and orthogonality precision better than  $0.05^\circ$ .



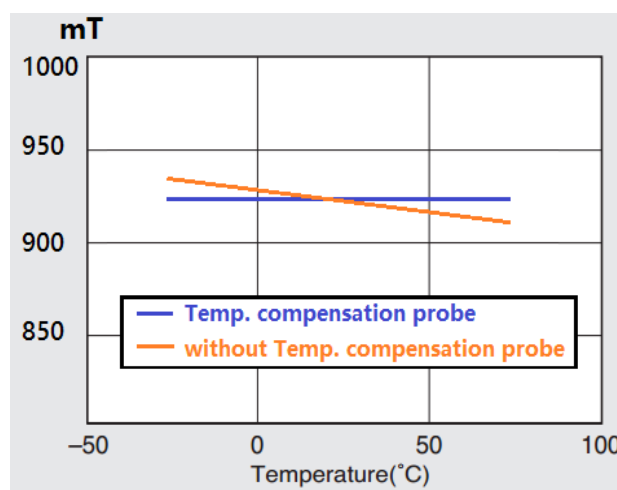


## 20μs Sampling Peak Mode

G92 Gaussmeter is capable of capturing the Peak measurements of a pulsed magnetic field and the fast variation of the magnetic field as narrow as 20μs in width.

## Temp. Compensation

Temperature coefficient of single axis probe is 300ppm/°C, temperature coefficient of 3-axis probe is 600ppm/°C, strongly recommend buying temperature compensation probe, can keep the precision and stability when the temperature changes.

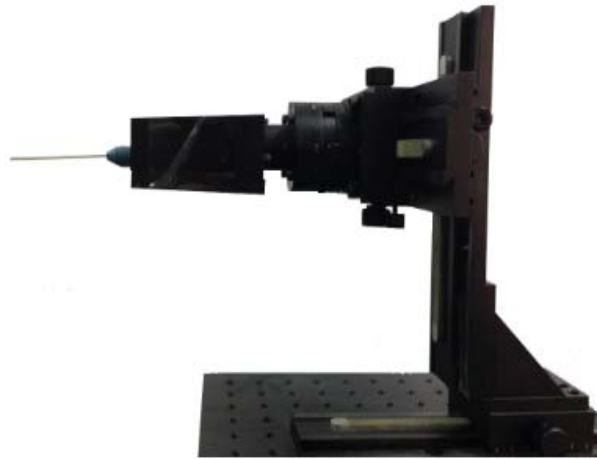


## High temperature probe

Our advanced technology and ergonomically designed probe provides high temperature operation : -20°C to +160°C (-4°F to +320°F)

## 3D Movement Platform

The 3-directions movement Platform is made of non-magnetic materials. Probe fixed to the bracket front-end, user can manually do any movement of the X, Y, Z directions, positioning accuracy is 0.1 mm.

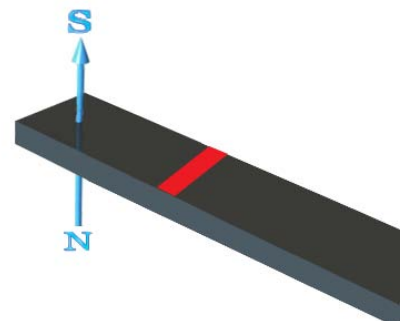


## Multi-probes Function

G92 Gaussmeter employs THREE CHANNELS MULTIPLEXER which allows customers to apply 3 probes simultaneously. Therefore these 3 probes can perform as 3 separate Gaussmeters.

## Magnetic Pole Direction

G90 Series can show the magnetic pole with colorful cartoon picture in LCD display.



## G90 Series Hall gaussmeter Specification:

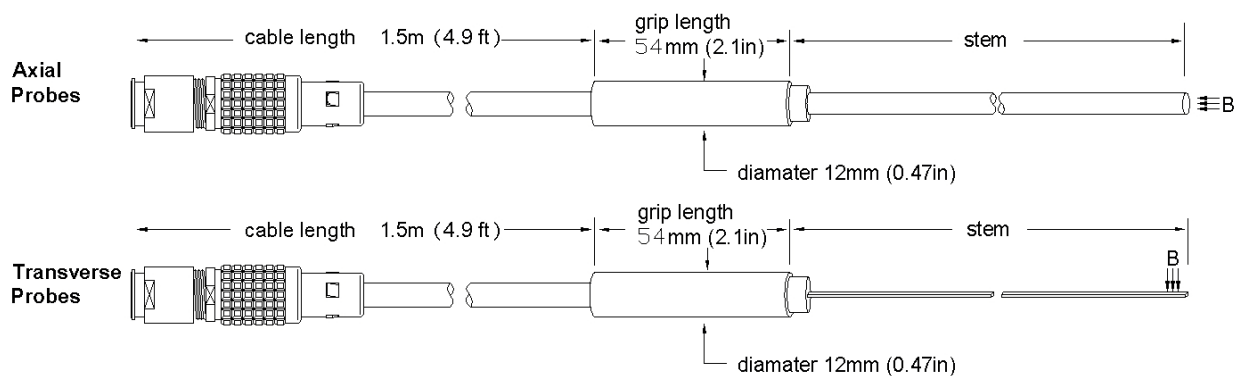
Option P(MODEL G92P): G92 with 20μs Sampling Peak Mode function

Model	G91	G92 G92P	G93 3-AXIS
<b>Precision</b>			
<b>Accuracy (DC)</b>	2% of reading± 3 Number of Count	1% of reading± 3 Number of Count	1% of reading± 3 Number of Count
<b>RANGE</b>	0.1G-20KG (auto range: 200G,2KG,20KG) 0.01mT-2T	0.1G-30KG (auto range: 300G,3KG,30KG) 0.01mT-3T	0.1G-30KG (standard probe)  1mG-30G (Low field probe)
<b>Frequency</b>	DC - 10KHz	DC - 30KHz	DC -100Hz
<b>Resolution</b>	0.1G	0.1G	0.1G
<b>Temperature compensation</b>	NO	YES	YES
<b>Function</b>			
<b>Unit</b>	GAUSS,T	GAUSS,T,A/M	GAUSS,T,A/M
<b>OPTION P: 20μs Sampling Peak Mode</b>	NO	SELECTABLE (model G92P)	NO
<b>High-speed large capacity memory</b>	NO	YES	YES
<b>Smart record and review</b>	YES	YES	YES
<b>SMART PHONE operating style</b>	YES	YES	YES
<b>Calibration remind</b>	YES	YES	YES
<b>Polar indication</b>	YES	YES	YES
<b>Hardware</b>			
<b>PROBE</b>	Transverse Probe, axial probe, Ultrathin Probe (0.5mm thickness).	Transverse Probe, axial probe, Ultrathin Probe (0.5mm thickness), High Temperature Probe(+160℃)	3-axis probe, Sensitive volume 0.1x0.1x0.1mm, orthogonality precision 0.05°
<b>3-axis probe</b>	NO	NO	YES
<b>±3V OUTPUT</b>	NO	YES	NO
<b>Can connect 3pcs probes simultaneously</b>	NO	YES	NO
<b>Temp. compensation probe</b>	NO	YES	YES
<b>USB output</b>	YES	YES	YES
<b>Rechargeable battery</b>	YES	YES	YES
<b>Touch Color Screen</b>	YES	YES	YES

## Unit General Specification

Operating temperature	-10°C to +60°C (14°F to 140°F)
Storage temperature	- 20°C to +75°C (-4°F to 167°F)
Display	3.2 inches colorful tough LCD,320x240 Pixel
SMART PC software	Selectable
Operating battery life	12 hours
Dimension	238mm x 95mm x 42mm 9.4" x3.75" x 1.65"
Weight	350g 0.8lbs
Battery	Rechargeable 4500mAH Li-ion

## Probes Specification



Model G91 gaussmeter Probes							
Probe Model	Range Resolution	& Frequency	Stem dimension mm	Working temp.	linearity	Stem material	
Transverse T08P150G91	Range 0-20KG, Resolution 0.1G	DC-10KHz	80*2.5*1	-20°C - +75°C	2%	PLASTIC	
Axial A08M150G91	Range 0-20KG, Resolution 0.1G	DC-10KHz	80*Φ5	-20°C - +75°C	2%	Copper	
0.5mm Ultrathin T06U150G91	Range 0-20KG, Resolution 0.1G	DC-5KHz	60*2.5*0.5	-20°C - +75°C	2%		

Model G92 gaussmeter Probes						
Probe Model	Range Resolution &	Frequency	Stem dimension mm	Working temp.	linearity	Stem material
<b>Transverse</b> T08P150G92 T08P150G92T	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*2.5*1	-20℃ - +75℃	1%	PLASTIC
<b>Transverse</b> T08M150G92 T08M150G92T	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*2.5*1	-20℃ - +75℃	1%	Copper
<b>High Temp. Transverse</b> T08H150G92 T08H150G92T	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*5*1	-35℃ - +160℃ (-31°F to +320°F)	1%	PLASTIC
<b>Axial</b> A08M150G92 A08M150G92T	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*Φ5	-20℃ - +75℃	1%	Copper
<b>High Temp. Axial</b> A08H150G92 A08H150G92T	Range 0-30KG, Resolution 0.1G	DC-30KHz	80*Φ5	-35℃ - +160℃ (-31°F to +320°F)	1%	Copper
<b>0.5mm Ultrathin</b> T06U150G92 T06U150G92T	Range 0-30KG, Resolution 0.1G	DC-10KHz	60*2.5*0.5	-20℃ - +75℃	1%	

Model G93 3-axis gaussmeter Probes						
Probe Model	Range Resolution &	Frequency	Stem dimension mm	Working temp.	linearity	Stem material
<b>Standard</b> Y08P150G93 Y08P150G93T	Range 0-30KG, Resolution 0.1G	DC -100Hz	80*5*1.5	-20℃ - +75℃	1%	PLASTIC
<b>Low Field</b> Y08L150G93	Range 0-45G, Resolution 1mG	DC - 60Hz	80*5*1.5	-20℃ - +75℃	1%	PLASTIC

Option "T" : TEMPERATURE COMPENSATED PROBE

## 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
STD30	Bracket for main unit
CAB20	Customized low impedance USB cable for communication and power connection.
CAB30	BNC adapting cable for analog output
GHOLD100	3-directions movement Platform for probe
SAMRT PC software	PC SOFTWARE for Gaussmeter
MULTI3	3 channels MULTIPLEXER , which allows to connect up to three probes simultaneously.
CKM10	Aluminum carry case

## Description of probe type selection

T	08	M	150	G93	T
PROBE TYPE	STEM LENGTH	PROBE STYLE	CABLE LENGTH	GAUSSMETER MODEL	TEMPERATURE COMPENSATED
A - AXIAL T - TRANSVERSE X - 2 AXIS Y - 3 AXIS	06 - 6 cm 08 - 8 cm 10 - 10 cm 25 - 25 cm ...	C – CRYOGENIC F – FLEXIBLE H – HIGH TEMP. L – LOW FIELD M – METAL P – PLASTIC U – ULTRATHIN W – WIDE FIELD	150 – 150cm ...	G91 – G91 probe G92 – G92 probe G93 – G93 probe	T - YES BLANK - NO

## Coliy precision magnetic product description

- If the ambient temperature of measurement field changes sharply, we suggest to use temperature compensation function.
- The difference of accuracy between Coliy products and other brand's products. Coliy's acquisition of accuracy is based on the accuracy or % of reading. Other brand's accuracy are list as % full scale. Coliy products' accuracy is always more precise than other brands. For example: When a magnetic field is detected at 500G, COLIY Gauss meter readings range  $500\text{G} \pm 500 * 1\%$ , other Gauss meter readings range  $500\text{G} \pm 3000 * 1\%$ , 3000G for the range.



Bracket and main unit,  
model STD30

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