

DX-160 Intelligent Digital Gauss Meter / Tesla Meter



DX-160 Full-digital high-precision gaussmeter/teslameter is designed for high-test precision, high-resolution magnetic field test applications. It integrates a variety of the latest high-tech digital technology, which ensure the accuracy, stability and repeatability of magnetic field measurement. It also provides a wide-range measurement from DC to up to 2.5kHz AC magnetic field measurement. It is designed and manufactured in accordance with ISO-9001 standard. With the functions of bright VGA color graphics, full menu operation, 5 3/4-bit readings, high-resolution 1 / 600000, it makes you convenient to observe 0.0001mT weak changes in the high magnetic field measurements. It is able to measure maximum at 30KG (3T). It has a large-capacity data storage and you can review the historical-data according to storage time. Specially designed professional graphics software can draw the chart, according to the magnetic field strength. With this Gauss-meter you can achieve goals of measuring, storage, communication, drawing automatically just in one machine. Products are mainly sold to large institutes, universities and research departments of large factories.

Main Function

*Ultra high-precision AC / DC magnetic field measurement.

*Excellent graphics of magnetic field strength and self-drawing.

*Extremely wide range: This machine can measure 0.1uT-10T extremely wide range, automatic identification of low and ultra-high magnetic probes, automatically adjusts to fit the magnetic field range stalls, manual-selected sub-third gear.

*Auto/Manual Storage: This machine provides 500 data storage space and automatically store data according to set time (1-60 seconds).Also it provides random storage and can be reviewed by time and stored order.

*Max / Min Lock: Turn on or off the peak measurement function.Capture and display the highest and the lowest magnetic field readings, and can lock the interface.

step 1: Maximum/minimum/peak/valley holding

step 2: interface locking

step 3: relieving

*Self-Zeroing mode

1) against zero magnetic field mode: put the probe into zero-Gauss calibrator chamber ,zeroing and store the data.

2) eliminate magnetic mode: put the probe horizontal to make sure it is vertical against geomagnetic,zeroing and store the data.

*Communications and drawing: Using RS-232 interface to send stored data to a computer to review historical data.If you have the Cuihai drawing software,then you can use it to draw high-precision charts and print or send it.

General parameters

Case	Metal
Environment Temperature	15 to 35 ° C Rated Accuracy
	5° C to 40 ° C accuracy reducing
Power Requirements	220-240 (+5 % , -10 %) , 50 or 60Hz
Size	320 mmWidth× 110mmheight× 287mm
Gross Weight	8kg



Features

5 3/4-bit resolution on VGA color panel	Basic DC accuracy: $\pm 0.20\%$ of reading
Self-Drawing and displaying function	Basic resolution: 0.00001 mT
Maximum/minimum /peak/valley holding and interface locking	Threshold setting and alarming
Data-storage(auto/manual)/historical-data reviewing	Auto-zero, automatic/manual range
Probe Auto Calibration / Auto Memory operation mode	RS-232C interface / data output
Display units optional Gauss, Tesla, A / M or Oe	Zero setting / relative measurement mode
Communication baudrate adjustment / working temperature display	Matching Zero Gauss Chamber/Gauss Meter Professional mapping software
Time and display brightness configurable	dozens of optional basic probe (standard 0.50mm ultra-thin probe)

Specification of DX-160

Range	(0.1mG-30Gs)/(1mGs-300Gs)/(0.01Gs-3000Gs)/(0.1Gs-30KG)	
Resolution	1mGs(0.1 μ T)	
Accuracy (display value)	DC	Reading of 0.20% $\pm$ 0.005% range
	AC	$\pm 1\%$ of reading
Frequency range	DC mode	Dc to 250Hz
Analog Output	AC mode	20Hz to 2.5kHz
	Output Voltage	$\pm 3V$ F.S.
	Connectors	Standard BNC
Additional effects	Temperature Coefficient	$\pm(0.02\% \pm 1 \text{ count})/^\circ\text{C}$
Temperature range	Working temperature	0 $^\circ\text{C}$ to +50 $^\circ\text{C}$
	Storage temperature	-20 $^\circ\text{C}$ to +60 $^\circ\text{C}$
Panel Display	3.5 inch VGA, 320 x 240 Pixel	
Communication Interface	RS-232 Standard 9-pin D-type connectors	
Supply power	Voltage: 200/240v Frequency: 50-60 Hz	



DX-160	*0-3mT	0-30mT	0-300mT	0-3T
Resolution	0.00001mT	00.0001mT	000.001mT	0000.01mT

Unit multiplier: m ,k ,M

Definitions of control keys: AC/DC Switch, Measurement Units, Range Switch, Data Storage, up/down/left/right direction, Menu, Max/Min/ Interface Lock, Zero Mode, Confirmation button, Relative mode, Reset mode

Keyboard: 14 membrane keys

Front Panel Features: Fine Human-Machine-Interface , Intuitive operation, operation tips, Brightness regulation, Panel Lock, Graphics display

Interface Features

RS - 232C interface function

Baudrate	19600, 57600 , 115200
connector	9 pin D-type , Terminal Configuration
Software Support	Standard interface definition

Analog output monitoring

Configuration	Real-time analog voltage output
Range	$\pm 3 \text{ V}$
Frequency Response	DC to 2500Hz
Accuracy	Depending on probe
Minimum load resistance	1 k (Short-Circuit Protection)
Connector	BNC



Probe Specifications

Input Type: Single Hall Effect Sensor

Probe Features: Linearity Compensation, Temperature Compensation,

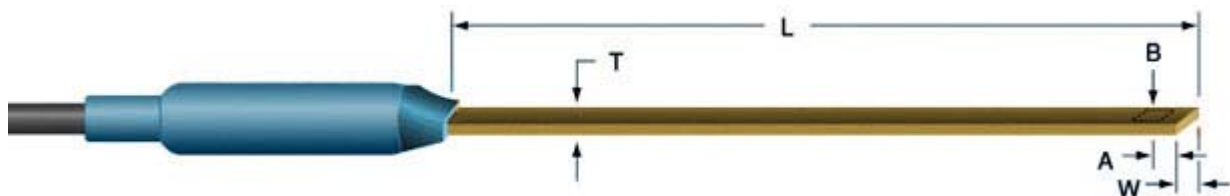
Auto Probe Zero, and Hot Swap , ultra-thin probe to only 0.5mm

Probe Compatibility: Standard probe or special probe

Connector: 15 pin D-type

1. Transverse probes

Model	L(inch)approx	T (mm)	W (mm)	A (mm)	Active area (mm)	Frequency range	Full Scale (Standard)	Zero field offset voltage(mv)	Stem material
MDX801 F	6/8/10	0.5	1.7	1±0.0.1	0.15	DC-800HZ	30KG	0.01to0.2	Brass



Gauss Meter Optional Accessories

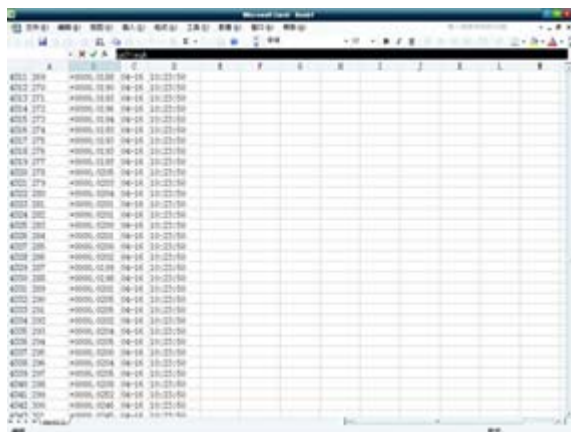
Gauss Meter Professional mapping software



Designed a multi-functional database stored px-1 mapping software for measuring and mapping.

Features

*Automatic storage of data.



The screenshot shows a data table within the software. The table has multiple columns, including time, magnetic field values, and location coordinates. The data is organized in a structured format, allowing for easy viewing and analysis of the collected measurements.

Mapping software can automatically save Gauss Meter serial data into the software database in order to facilitate the interception of useful data at any time querying and mapping.