**REF No: 1054** 01/01/2025



## **Technical News Letter**



### MAGTRANS now offers you the complete Magnetic Measurement solutions from DEXINMAG

Xiamen Dexing Magnet Tech. Co., Ltd., is an ISO 9001-2015 is a high-tech company with excellent quality and comprehensive services in the international magnetic measurement industry. We Supply Digital Tesla meter/Gauss meter, Hall effect measurement system, Flux gate magnetometer, Helmholtz coil, NMR Permanent magnet, Solenoids, Precision current source, Lock-in amplifier, Weak Magnetic Shielding system, AC/DC magnetic field control system to leading Education and Research Institutions, Industry leading Test and Measurement Customers and High End Research Labs.

MAGTrans Systems Private Limited is an ISO 9001-2015 company with 45 years of experience representing National and International reputed companies in supply, service and maintenance of Intelligent Process Cooling Solutions, Testing, Measuring & Analytic equipment, Reliability & Environmental Testing Equipment and a complete product range of Magnetic Measurement instruments & Systems in India.

DexinMag also offers a cost-effective alternative to expensive replacement parts in your existing magnetic measurement systems. Our high-performance products integrate seamlessly with minimal programming, lowering maintenance and upgrade costs for research, defense, aerospace, and scientific institutions in India.

### **Product Range of Magnetic Measurement Solutions**

### **Closed Cycle Cryostat**

Models	Specifications	
DX 101D, DX 101D-4W, DX 305D, DX 305D-4W, DX 408D2, DX 408D2-4W	Cooling Time as low as 60min to 4K Temperature Range: 4-325K Cooling power upto 30W@4.5K Power Consumption: 6.5-7.2KW Three-phase: 380V 50/60Hz Cooling Water flow: 7-10L/min Cooling method air cooled or water cooled Cooling Water Temperature if needed: 4-28°C	





**Vibrating Sample Magnetometer** 

## **Vibrating Sample Magnetometer**

Models	Specifications
DXV-100, 130, 175, 220, 250, 300, 380, 400, 9000	VSM to measure materials properties, hysterisis loop, magnetisation curve, heating cooling, curve, coercivity, magnetic energy products, Curie temperature, permeability, even at liquid nitrogen & high temperature. Max Magnetic Field Strength in 35mm Air Gap: 0.8-3T Magnetic mome range: 35*10-9 emu to 103 emu Sensitivity: 10-7 emu to 5*10-5 emu Relative accuracy, Repeatability, Stability: 30emu ± 0.5-1% Temperature Range: -196 to 900°C

## **Magneto-Optical Kerr Effect Magnetic Measurement System**

Models	Specifications
DX MOKE Surface System	Kerr angle resolution: less than 0.001 degrees; Ellipse resolution: less than 0.1%; Minimum spot: 10 microns; Maximum magnetic field: 2.2T (select EM7 electromagnet); Rotation angle step 0.1 degrees, and the up, down, left, and right displacement steps are 10 microns; Noise: less than 1%. Temperature range: 100K ~ 300K; Local property characterization area 220 nm



MOKE Magi



Dielectric Measurement System

## **Dielectric Measurement System**

Models	Specifications
DMS30 Dielectric System with high and low temperature option	Input Voltage: $110\text{-}220\text{V}$ Temperature range: $-185\text{-}600^{\circ}\text{C}$ Test Frequency: $20\text{Hz}\text{-}10\text{MHz}$ Heating method: DC electrode heating Cooling method: Water cooling Electrode material: Platinum Low temperature refrigeration: Liquid nitrogen Sample size: $\phi$ <25mm, d<4 mm Temperature control accuracy: $\pm 0.25^{\circ}\text{C}$

### **Soft Magnetic Material Measurement**

Models	Specifications
DX-2012SA	Testing sample varieties: soft magnetic ferrite, permalloy, amorphous, amorphous and nm crystal.  power sources options: 1kHz ~ 300kHz or 500kHz, 5kHz or 10kHz ~ 100kHz  Display I (t), U (t) and B (t) sampling waveform and B (H) hysteresis loop





Permanent Magnet Material

#### Permanent Magnet Material Measurement

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	Models	Specifications
1	DX-30 Hall Effect Meter (Combination of DX-30 Permanent magnet, DX- 320 Sample constant source)	Magnitude of magnetic field 500mT (Pole head spacing: 18mm) Resolution of current - 0.0001uA Resolution of voltage 0.0001mV Output range: 50.00nA-50.00mA



## **Technical News Letter**



# **Zero Magnetic Shielding Magnetic Generation System**

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Models	Specifications	
DXGE-30T Zero Magnetic Field Shielding System	Shielding effect of residual magnetism ≤10nT Magnetic field fluctuation can reach ≤1nT Residual magnetism upto ≤1nT Magnetic field strength range: - 1000000nT~1000000nT; Magnetic field uniformity: better than 1% connectors made of black FR4 epoxy boards	7-1



Zero Magnetic Field Shielding Magnetic Generation System



AC & DC Magnetic Field Control Field Generation System System

# AC & DC Magnetic Field Control Field System

Models	Specifications
System integration of DXHC25-100, DXACF-2500, Software	Radius: 250mm Gaussmeter/ fluxgate meter: for ultra-low magnetic field such as 1GS Power Supply max voltage 50V Guassmeter Accuracy: 0.1µT/1mT (standard) and an Accuracy ±0.20%

## **Multidimensional Magnetic Field Measurement**

Models	Specifications
DX-360,	Capacity: 10nT-30T Space measurement range: 200mm
DX-210,	x 200mm x 200mm
DX-180,	Resolution ratio: 0.00039mm Positional accuracy 0.01mm,
DX-160	Repeat positional accuracy < 0.005mm Rotation travel angle resolution
	ratio <0.0002°



Multidimensional Magnetic Field Measurement System



Magnetic Field Mapping System

## **Surface Magnetic Distribution Measurement**

Models	Specifications
DX-2012RA, DX-2012RB, DX-2012RC, DX-2012RD	Power supply: 12V ~40VDC Capacity: 0.1KVA Output current: Peak 2.6A/phase (Max) Drive mode: Space vector bipolar constant current drive Excitation method: Sixteen subdivision modes are available Insulation resistance: Under normal temperature and pressure > 100MΩ Insulation strength: 0.5KV under
	normal temperature and pressure, 1Min

## **Hall Effect System**

magnets,

Effect

DX-99 Fast Hall

Models	Specifications	
DX-30 Permanent Magnet, DX-50/60 Electro magnetic (EM) Fully Automatic DX-80 Room Temp EM & Automatic, DX-100/200 High & Low temp Fully	High stability PM of 0.5T with adjustable strength, cost effective. EM Field strength - 0.7T, Air Gap-20mm, current O/P- 0.1nA to 50mA, Voltage test- 0.1mV-3V. Constant Current source, Micro voltmeter measuring carrier conc, mobility, resistivity & Hall coef. Room temp, high-low temp, adjustable magnetic field range 0-3T, customisations possible.	
Automatic, DX-3000 High &	Hall effect with magneto- resistance IV characteristics. non-	
Low temp Super	liquid helium super conducting	
conducting	magnets for sample testing.	



Hall Effect System



Lock in Amplifier

## Lock-in Amplifier

Models	Specifications
DXA-001 100KHz Lock-in Amplifier, DXA-001C 102KHz Dual Channel Phase - Locked , DXA-003 10MHz Lock-in Amplifier, DXA- 004 60MHz Lock- in Amplifier	Measurement Range: 102kHz, 10MHz, 60MHz Time Constant: 10us to 3ks, N/A, 30ns to 4ks, 30ns to 4ks Noise: 5nV/√Hz, 5nV/√Hz, 5nV/ √Hz, 2nV/√Hz Measurement method: Multi Harmonic, Simultaneous 6 Channel Harmonic, Simultaneous Multiple Harmonic Speciality: Dual Signal generator, PID automatic control

## **Precision Power Supply to Magnetic Field Generating Devices**

change & one-key test.

Small volume, Fast speed, sample

Models	Specifications	
DX62183060, DX62186030, DX621810018, DX621815012, DX62183006, DX62186003	Power Upto: 15000 W  Voltage range: 0~1500V  Current Range: 0~10A  Load adjustment rate upto on voltage: ≤0.05%+30mV on current: ≤0.1%+30mA  Set Accuracy upto on voltage: ≤0.05%+300mV on accuracy: ≤0.1%+30mA	



Power Supply to Magnetic Field Generating Devices



Impedance Analyzer

### Impedance Analyzer

Models	Specifications
DX6630-1 DX6630-3 DX6630-5 DX6630-1 DX6630-20 DX6630-30	Test Frequency: Models upto 10 Hz-30 MHz Output impedance: 25Ω, 100Ω (switchable) Basic accuracy ±0.05% DC test signal accuracy 1V (fixed) AC Test signal voltage range: 10mV-2Vrms
	AC Test signal Accuracy:
	ALC OFF: 10% *Set voltage $\pm$ 2mV
	ALC ON: 6% *Set voltage $\pm$ 2Mv



## **Technical News Letter**



#### **Electromagnet**

Models	Specifications
DXWD-50, DXSB-80	Structure: Single yolk double adjustment / double yolk frame Air gap: 0-80mm, 0-100mm Cooling: Naturally Field is horizontal to ground Pole diameter: 50-80mm Central Magnetic Field (Hmax) >= 0.5-1T Weight: 40kg/100kg Power Supply: 300-600W



Electromagnet

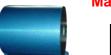


Helmholtz Coil

#### Models **Specifications** DXHC30-2 to 50, Radius: 200-300mm DXHC25-2 to Centre magnetic field: 2-1000, 1000Gs DXHC20-5 to 500 Uniformity: 0.01-5% Homogeneity sphere diameter: 26-200mm Each diamension power range: 12-5000W 1D weight: 4-500kg **3D weight:** 11-138kg

#### **Solenoid**

Мо	dels	Specifications
DXS DXS	SL80-1, SL35-10, SL20-200, SL250-1, SL30-2000	Length: 800,350,200,2500,320mm Outer - Inner Diameter: 400-370,220-190,100-50,500- 470, 280-50mm Central Magnetic Field strength: 1,1,200,1,2000Gs Uniform Zone length: 500,100,20,250,30mm Uniformity: 1,1,0.5,0.1,0.6%



Solenoid



Magnetizer/ Demagnetizer

## Magnetizer/Demagnetizer

Models	Specifications
DX-MAG- 25C10, DX- MAG25C15 , DX- MAG25C20	Input Power: AC220 $\pm$ 10%, AC380 $\pm$ 10% Input Current: 40A Charging Voltage: DC200V - 2500V Electric Capacity: 1000 $\mu$ F, 1600 $\mu$ F, 2000 $\mu$ F Stored Energy: 3125J, 5000J, 6250J Output Current: 30kA Magnetizes the cycle: 2 sec/ time, 3 sec/time, 3 sec/time

### Fluxgate Magnetometer

Models	Specifications
DX-210B, 201 Oxide Scale Tester	Test Range: ±3mWb ±30mWb ±300mWb ±3000mWb four gears -20.00mWb  Minimum resolution: 0.1uWb -10uWb  Resolution Error: 1/30000 of range Accuracy: 0.1-1%





Fluxgate Magnetometer

## **High Precision Digital Flux Meter**

Models	Specifications
DX-310/310A,	Measurement Range- 1
330F, 350	<b>Dimension</b> : $\pm$ 100 $\mu$ T/ $\pm$ 1000 $\mu$ T
	3 Dimension: $\pm$ 100 $\mu$ T/ $\pm$ 500 $\mu$ T/ $\pm$
	1000μT
	Resolution: 0.1nT-1nT
	Error Temperature Co-efficient: 1nT/°C
	Frequency response: 0-1000Hz
	Accuracy: 0.1-1%
	Bandwidth: >1kHz at -3dB
	Output: RS232, BNC(analog)

### **Desktop Gauss/Tesla Meter**

Models	Specifications
DX-103B Desktop type,1205F,16 0,180,190, 210,360	Measurement Range: 0-0.2T-2T-10T-30T-Single/2 probe Type: AC/DC Magnetic field Function: Peak holding Communication: RS-232, USB, BNC, Mobile App Resolution: 0.1μT/1mGs/0.01/0.1Gs Accuracy: 1% Software: 3 Dimensional Diagrams



Portable Gauss Meter

### **Portable Gauss Meter**

Models	Specifications
DX-102,102F, 103 Portable	Measurement Range: 0/30mT/ 300mT/3T DC Range: 30kg/6kg/600g AC Range: 3.6/1.2/120kg Resolution: 0.1Gs Accuracy: 1% Function: Peak hold Communication: USB, RS-232(Programmable)



## **Technical News Letter**



At MAGTrans, we take pride in delivering magnetic solutions that meet diverse requirements, regardless of the complexity of your application. Whether it's academic research or large-scale industrial operations, we ensure our solutions are precisely tailored to your needs.

Additionally, we can customize our solutions to suit your specific requirements. Beyond the products mentioned above, the additional offerings listed below further expand our ability to meet a variety of needs. Click on any of the names to find out more.

Magnetic Field Generat	ion and Control Systems	
Three-dimensional Magnetic Field Probe Station	Multipole Electromagnet	
No Magnetic Moment Helmholtz Coil	High Uniformity Combined Helmholtz Coil	
3 Axis Helmholtz Coil	Gradient Magnetic Field Coils	
Three-dimensional Superconducting Magnet	3D Superconducting Coil	
Constant Magnetic Field Permanent Magnet	Rotating Magnetic Field Permanent Magnet	
Pulse Magnetizer	Magnetizing Source	
Magnetic Flux Density Experimental Device	Magnetizing Source	
Magnetic Measurement and Testing Equipment		
Micro MOKE Magnetic Measuring Instrument	3D Gauss Meter	
Three-Dimensional Digital Flux Meter	Core Loss Tester	
Magnetic Moment Testing Equipment for Rare Earth Permanent Magnet Materials	Silicon steel material automatic measuring device	
Ferroelectric Test System	Magnetostrictive Materials Measuring System	
Magnetic Material Prod	duction and Processing	
Flexible Neodymium Magnets	Bonded Ferrite Magnetizer Machine	
Vacuum Melt Spinning System	Silicon Carbide Crystal Growth Furnace	
Coating and Film I	Deposition Systems	
Magnetron Sputtering Coating System	Single Chamber Magnetron Sputtering System	
Pyriform Single Chamber Magnetron Sputtering System	Thermal Evaporation Vacuum Coating Machine	
Laser Coating Equipment	Laser Molecular Beam Epitaxy System	
Electron Beam Coating System	Single Atomic Layer Film Growing Equipment	
Three-dimensional Magnetic Field Probe Station	Wafer Level Automatic in-plane Magnetic Field Probe Station	
BH Tracer Hysteresis Graph Test System		
Power and Signal A	mplification Systems	
High Voltage Power Amplifier	Electromagnetic Vibration Exciter	
Special Purpose Systems		
Geomagnetic Shielding System	Dielectric Charging and Discharging System	
Laser Doppler Vibrometer	AC solenoid Impulse solenoid	
ECR Ion Source Hexapole Permanent Magnet	Piezoelectric Coefficient Tester	

For any product and application details contact:

**MAGTrans Systems Private Limited** 

Sales Office: 3-6-369/A/10, Flat no.1, Srinilayam, Street no.1, Himayathnagar, Hyderabad-500029

Ph: 9392123094 Mail: sales@magtrans.in | URL: www.magtrans.in