

PPMS[®]-MFM/AFM

with high resolution
fibre interferometer
& alignment-free cantilevers

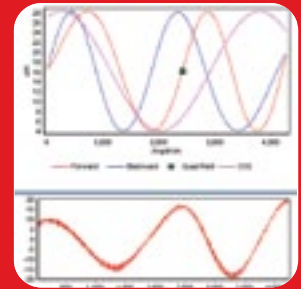




**NANOMAGNETICS
INSTRUMENTS**

PPMS[®]-MFM/AFM

with high resolution fibre interferometer
& alignment-free cantilevers



Magnetic domains of garnet
single crystal at 300K



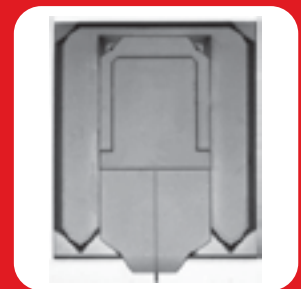
Magnetic domains of garnet
single crystal at 1.9K



NIST hard disk at 77K



Alignment free cantilevers
from NanoSensors[®]*



System Specifications

Imaging Modes	: MFM, Conductive AFM, EFM, STM, Contact/Semicontact/Non-Contact mode AFM using digital PLL		
Scan Size	: Large Area Scan Head	: Standart Scan Head	: Small Area Scan Head
	150 x 150 µm @ 300 K 36 x 36 µm @ 77 K 18 x 18 µm @ 4.2 K	52 x 52 µm @ 300K 14 x 14 µm @ 77 K 6 x 6 µm @ 4.2 K	8 x 8 µm @ 300 K 3.5 x 3.5 µm @ 77 K 1.5 x 1.5 µm @ 4.2 K
Z Range	: 7.0 µm @ 300 K 1.8 µm @ 77 K 0.8 µm @ 4.2 K	4.8 µm @ 300 K 1.2 µm @ 77 K 0.5 µm @ 4.2 K	2.4 µm @ 300 K 0.6 µm @ 77K 0.25 µm @ 4.2K
Head Dimensions	: 23.6 mm OD x 125 mm or 25.4 mm OD x 100 mm		
Sample Approach	: Stick-slip type; 10 mm Z, Ø3 mm XY range with 50 - 800 nm step size		
Fine Sample Positioning	: Capacitive encoder with 2 µm resolution		
Sample Size	: 15 x 15 x 5 mm maximum		
Sample Holder	: 5 pins connections for experiments: One bias voltage, 4 spares		
Temperature Range	: 1K-300 K (Limited by the PPMS or the cryogenic system)		
Magnetic Field	: >16 T		
Operation	: Vacuum or exchange gas environment		
Compatibility	: PPMS. PPMS Evercool can also be compatible with switched off compressor during experiments. Oxford Instruments' Dilution Refrigerators and He ³ systems. Can be customised to fit in to other mK systems if free space permits.		

Software upgrades are free for lifetime

Note: Specifications are subject to change without notice.

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