

# Lake Shore Magnetometers



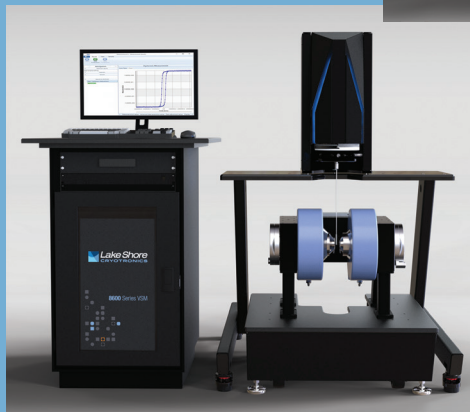
		8604—all modes Maximum ramp rate 10 kOe/s (1 T/s)	8607—high field mode Maximum ramp rate 5 kOe/s (0.5 T/s)	8607—high speed mode Maximum ramp rate 10 kOe/s (1 T/s)	7404-S	7407-S	7410-S
<b>Magnet</b>		4 in	7 in	7 in	4 in	7 in	10 in
<b>Maximum field at room temperature</b>		2.76 T	3.26 T	2.40 T	2.63 T	3.05 T	3.42 T
<b>Maximum field at variable temperature</b>	LHe/LN <sub>2</sub> cryostat	1.55 T	2.31 T	1.50 T	1.49 T	2.12 T	2.59 T
	Single stage	2.03 T	2.62 T	1.90 T	1.75 T	2.28 T	2.76 T
	Oven	1.55 T	2.31 T	1.50 T	1.49 T	2.12 T	2.59 T
<b>Maximum field with vector</b>		2.03 T; 1.55 T with cryostat or oven	2.62 T; 2.31 T with cryostat or oven	1.90; 1.50 T with cryostat or oven	0.77 T	1.25 T	2 T
<b>Sensitivity at room temperature</b>	0.1 s/pt	150 nemu			450 nemu		
	1 s/pt	60 nemu			175 nemu		
	10 s/pt	15 nemu			60 nemu		
<b>Sensitivity with SSVT</b>	10 s/pt	120 nemu			1.25 μemu		
<b>Sensitivity with oven or cryostat</b>	10 s/pt	500 nemu			2.5 μemu		
<b>Sensitivity with vector</b>	10 s/pt	Future			5 μemu		
<b>Repeatability</b>		±1%			±1%		
<b>Accuracy</b>		±1%			±1%		
<b>Stability</b>		±0.05%/day			±0.05%/day		
<b>Field setting resolution</b>		1 mOe			20 mOe		
<b>Maximum sample size</b>		1 in (10 mm × 10 mm typical)			1 in (10 mm × 10 mm typical)		
<b>Vector sense coils</b>		Yes (optional)			Yes		
<b>Sample rotation</b>		Yes (standard)			Yes (optional)		
<b>Magnetoresistance</b>		Future			Yes		
<b>CCR option</b>		Future			Consult Lake Shore		
<b>Variable temperature</b>	LHe cryostat	4.2 K (base), 5.5 K to 450 K (control)			4.2 K (base), 5.5 K to 450 K (control)		
	LN <sub>2</sub> cryostat	77.6 K (base), 85 K to 450 K (control)			77.6 K (base), 85 K to 450 K (control)		
	Single stage	78 K (base), 100 K to 950 K (control)			78 K (base), 100 K to 950 K (control)		
	Oven	303 K to 1,273 K			303 K to 1,273 K		

## 8600 Series VSM

- Magnetometers for leading edge research
- $15 \times 10^{-9}$  emu noise floor at 10 s/pt
- 10 ms/pt data acquisition rate
- 10,000 Oe/s field ramp rate
- Rapid, repeatable temperature option exchange
- High stability— $\pm 0.05\%$  per day
- Fields to 3.26 T—4 and 7 in magnets
- Widest available temperature range—4.2 K to 1273 K
- Standard sample rotation



Model 8607



Model 8604

## 7400-S Series VSM

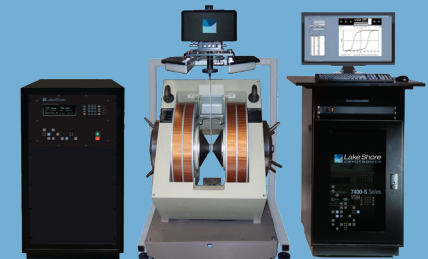
- General purpose magnetometers
- Broad range of capabilities
- Fields to 3.42 T—  
4, 7, and 10 in magnets
- Sample size up to 1 in
- High temperature oven,  
LHe cryostat, LN<sub>2</sub> cryostat,  
and single stage options
- Magnetoresistance, vector,  
and sample rotation options



Model 7404-S



Model 7407-S



Model 7410-S