

# atto3DR

## Technical Specifications

General Specifications	
type of instrument	transport measurement module for angledependent magneto-resistance measurements
sensor head specifics	2 combined rotators with eucentric rotation*
Sample Positioning	
total travel range	full 3D sphere via $\pm 90^\circ$ for both closed loop rotators (reserve
step size	approx. $1 \text{ m}^\circ @ 300 \text{ K}$ , $0.5 \text{ m}^\circ @ 4 \text{ K}$
fine scan range	$40 \text{ m}^\circ @ 300 \text{ K}$ , $6 \text{ m}^\circ @ 4 \text{ K}$ (scan resolution
sample holder	ASH/CC/20 fits 20 pin LCCC, connected to 20 wires as twisted pairs, max. sample size $4.9 \text{ mm} \times 4.9 \text{ mm}$ (others on request)
Suitable Operating Conditions	
temperature range	$1.5 \text{ K}..300 \text{ K}$ (dependent on cryostat); mK compatible setup available on request
magnetic field range	$0..15 \text{ T}+$ (dependent on magnet)
operating pressure	designed for He exchange gas
Suitable Cooling Systems	
bore size requirement	designed for a 2" (50.8 mm) cryostat/magnet bore
compatible cryostats	attoDRY 2100, attoLIQUID2000
Compatibility with Electronics	
scan controller and software	ANC350 (for detailed specifications please see attoCONTROL section)
Options and Upgrades	
sample holder upgrade	ASH/CC/24 fits 28 pin LCCC, connected to 24 wires as twisted pairs, max. sample size $7.8 \text{ mm} \times 7.8 \text{ mm}$ or ASH/CC/28 fits 32 pin LCCC, connected to 28 wires as twisted pairs, max. sample size $6.7 \text{ mm} \times 6.7 \text{ mm}$

