

attoCFM Ixs

Technical Specifications

Confocal Unit		
pinhole configuration	two pinholes (fiber apertures), different illumination and collection wavelength possible	
pinhole size	dependent on fibers, typically 3 9 μm mode field diameter	
compatible LT-objective	LT-APO/VIS, LT-APO/VISIR, LT-APO/NIR(see accessory section for more information)	
inspection unit	sample imaging with large field of view: $~54\mu m$ (attoDRY), $~40\mu m$ (attoLIQUID)	
Illumination		
excitation wavelength range	400 1000 nm, default 650 nm (others on request)	
illumination port specification	FC/ APC-connector for single mode fibers or free-beam configuration	
Detection		
detection mode	e.g. reflection, luminescence, fluorescence, Raman (optional)	
detection wavelength range	detector upon user`s choice, typically Si detector (coupling of the light to other detectors)	
detection port specification	FC/ APC-connector for single mode fibers or free-beam configuration	6
Sample Positioning		- 6
total travel range	3 x 3 x 2.5 mm³ (open loop)	
step size	0.053 μm @ 300 K, 10500 nm @ 4 K	
fine scan range	15 x 15 μm² @ 4 K, 30 x 30 μm² @ 300 K (optional, open loop)	
sample holder	Ti plate with integrated heater and calibrated temperature sensor	
Suitable Operating Conditions		
temperature range	1.5 K300 K (dependent on cryostat); mK compatible setup available on request	
magnetic field range	014 T (dependent on magnet)(16 T compatible version available on request)	
operating pressure	designed for He exchange gas	
Suitable Cooling Systems		
titanium housing diameter	23.9 mm	
bore size requirement	designed for 1" (25.4 mm) cryostat/magnet bore size (e.g. PPMS)	
compatible cryostats	see PPMS compatibility chart	
Compatibility with Electronics		
laser	LDM600 laser/detector module (for detailed specifications please see attoCONTROL section)	



