

Characterization and Metrology Equipment List



Category	Description	Manufacturer	Model #
Spectral Measurements			
	Spectrophotometer UV-Vis-NIR	Agilent	Cary 7000 UMS
	Spectrophotometer UV-Vis-NIR	Perkin Elmer	Lambda 950
	Spectrometer FTIR (from 2 to 330 microns)	Bruker Optics Ltd.	Vertex-70
	Spectrophotometer UV-Vis-NIR	Perkin Elmer	Lambda 19
	Spectrofluorometer	Horiba Jobin Yvon	FluoroMax-4P
Emission Spectrum of Light Sources			
	Fiber optics spectrometer (350-1000nm)	Ocean Optics	USB4000
	Fiber optics spectrometer (200-1100nm)	Ocean Optics	HR4000
	Spectroradiometer / photometer	Photo Research	PR-680 SpectraDuo
	Spectroradiometer	ASD	FieldSpec 3
Luminous Intensity and Illuminance			
	Photometer / Radiometer	International Light	IL 1400
Luminance and Contrast			
	Luminance meter	Konica Minolta	CS-100
Colorimetry			
	Reflected-light colorimeter	Konica Minolta	CR-231
	Luminance and color meter	Konica Minolta	CS-100
Interferometry			
	4-inch Fizeau interferometer	Zygo Corporation	GPI xps
	6-inch Fizeau interferometer	Zygo Corporation	Verifire XP/D
Wavefront Measurement			
	High-resolution wavefront sensor (visible, NIR)	Phasics	SID4 HR GE
	Infrared wavefront sensor (MWIR, LWIR)	Phasics	SID4 DWIR
MTF Measurement			
	Modulation Transfer Function (MTF)	Optikos Corporation	Video MTF System
Precision Angle Measurement			
	Theodolite	Swisstek	E2
	Electronic autocollimator	Newport	LDS-Vector
	Autocollimator	Möller-Wedel	AKR 300/40/17.7 SWL

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	Goniometer	TriOptics	PrismMaster C-200
Precision Measurement using a Microscope			
	Optical microscope	Nikon	n/a
	Scanning Electron Microscope (SEM)	Hitachi	S-3400N
	Atomical Force Microscope (AFM)	Digital Instrument	3000
	Digital microscope	Keyence	VHX-1000
Optical Components Inspection			
	Focometer	Möller-Wedel	MELOS 500
Surface Measurement			
	Interferometric laser scanning confocal microscope	Olympus	LEXT OLS31-SU
	Surface profilometer	Sloan Technology Corp.	DEKTAK/ST
	3D Microscope based on white light interferometry	Bruker Optics Ltd.	NPFLEX
Thin Films Characterisation			
	Stress measurement	KLA-Tencor	FLX 2320
	Spectroscopic ellipsometer	J.A. Woollam	V-Vase
Optical Fiber characterisation			
	Optical Spectrum Analyser (OSA)	HP or Agilent	n/a
	Optical fiber analyser	Photon Kinetics	S14
	Preform analyser	Photon Kinetics	2600HP
	Loss tester	EXFO	FOT-930
Laser Beam Profiling			
	XY Scanning Slit System (190-1150nm)	DataRay	Beam'R2
	NanoScan laser beam profiling system	Photon Inc.	n/a
Custom Optical Systems Alignment			
	Centering machine	TriOptics	OptiSpheric AF
	Precise position measurement	Fogale	Lenscan LS600-1CH