

# UV TO MID-IR SPECTROMETERS

GWU-Lasertechnik



20-Year Focus on Developing Spectrometers



## Micro Spectrometer

— UV-VIS-NIR —

Uncooled

Cooled

800nm



### Ultra-Mini ATP1XXX

Model	Description
ATP1010	180-1100nm UV Enhance
ATP1012	With Xenon Light Source Driver



### High PPR ATP2XXX

Model	Description
ATP2000P	180-1100nm, Perfect replacement USB 2000+
ATP2000H	High speed to 4KHz
ATP2001	With Xenon Light Source Driver
ATP2100	Highest SNR, Editable waveforms
ATP2110	Water Quality Analyser
ATP2400	Ultra-thin, Small Size, 180-1100nm, Benchmarking Ocean Insight Flame series)



### High Resolution ATP3XXX

Model	Description
ATP3000/4	Cross C-T, High Sensitivity, Perfect replacement HQ2000, HR4000
ATP3030/4	High Resolution, M-shaped Light Path, Low Stray Light
ATP3330/4	Ultra-thin, High Resolution, M-shaped Light Path



### Low Stray Light ATP4XXX

Model	Description
ATP4000	Concave grating, focus=86 mm
ATP4120	Concave grating, focus=137 mm, NA=0.073
ATP4150	Concave grating, focus=137 mm, NA=0.182
ATP4170	Concave grating, focus=137 mm, NA=0.255



### Cooled CCD ATP5XXX

Model	Description
ATP5100	Ultra-miniature, TEC Cooled
ATP5040	Cooled 4096CMOS Detector
ATP5020P	Cross C-T, High Sensitivity, Better than MAYA
ATP5030P	High Resolution, M-shaped Light Path, Low Stray Light
ATP5030/4	Cooled 2048/4096CMOS Detector, M-shaped Light Path
ATP5303/4	Cooled 2048/4096CMOS Detector, Ultra-High Resolution



### Scientific Class ATP6XXX

Model	Description
ATP6500	FFT Cooled, Replace QE65 Pro
ATP6500T3	3-stage TE-cooled, Lowest Noise, Lowest Dark Current
ATP6530	High Resolution, M-shaped Light Path, Low Stray Light
ATP6530T3	3-stage TE-cooled, M-shaped, Lowest Noise, Lowest Dark Current



### Ultra-high Resolution ATP7XXX

Model	Description
ATP7330-FL210	focus=210 mm, Built-in multi-grating
ATP7330-FL350	focus=350 mm, Built-in multi-grating
ATP7330-FL510	focus=510 mm, Built-in multi-grating
ATP7330-FL760	focus=760 mm, Built-in multi-grating

-Grating Spectrometer-

800nm

NIR

2600nm

2.5µm

1µm



### Low Cost ATP8600



### High Resolution ATP8730



### High Performance ATP8000



### Highest Performance ATP8000T3



### MWIR+LWIR ATP8250

## NIR Spectrometer Series

— SWIR+MWIR+LWIR —

Parameter	Description
Type	High-performance line array InGaAs CCD
Spectral range	900-1700 nm
Valid pixels	256
Wavelength range	900-1700nm (Customized)
Optical Resolution	4-20 nm (Depend on the slit, the actual spectral range)
SNR	> 150:1
Optical Design	F/4 Crossed asymmetric C-T Light Path
Incident slit width	5, 10, 25, 50, 100, 150, 200, 300um(Customized)
Integration time	1-100ms

Parameter	Description
Type	Line array InGaAs CCD (Down to -20°C)
Spectral range	900-1700 nm (Customized)
Valid pixels	1024
Wavelength range	900-1700nm (Customized)
Optical Resolution	30pm-2nm (Depend on the slit, the actual spectral range)
Max Dynamic Range	> 1400
Optical Design	F/4 asymmetric C-T Light Path
Incident slit width	5, 10, 25, 50, 100, 150, 200, 300um(Customized)
Integration time	10us-256s

Parameter	Description
Type	Cooled Line-array InGaAs CCD (Down to -20°C)
Spectral range	900-1700 nm, 900-2100nm, 900-2500nm three sensors
Valid pixels	256/512/1024 (Recommended 512 pixels)
Wavelength range	900-2600nm (Customized)
Optical Resolution	0.05-5nm (Depend on the slit, the actual spectral range)
SNR	> 10000:1
Optical Design	F/4 Crossed asymmetric C-T Light Path
Incident slit width	5, 10, 25, 50, 100, 150, 200, 300um(Customized)
Integration time	7.8ms-65s

Parameter	Description
Type	Deep Cooled Line-array InGaAs CCD (Down to -30°C)
Spectral range	900-2600nm (Customized)
Valid pixels	256/512/1024 (Recommended 512 pixels)
Wavelength range	900-2600nm (Customized)
Optical Resolution	0.05-5nm (Depend on the slit, the actual spectral range)
SNR	> 10000:1
Optical Design	F/4 Crossed asymmetric C-T Light Path
Incident slit width	5, 10, 25, 50, 100, 150, 200, 300um(Customized)
Integration time	7.8ms-256s

Parameter	Description
Type	Pyroelectric Linear-array Sensor
Characteristic	Ultra-low noise CCD signal-related dual sampling processing circuit
Spectral range	2.5-5um or 5.5-11um
Wavelength range	30nm or 50nm
Optical Resolution	Be related to the width of the incident slit
Optical input interface	SMA905 fiber interface or free space access
CCD parameter	256 x 1 pixel, 50 x 400um
Power Supply	DC 5V
Weight	180g