

# Spectrometer Product Line

A Full Range of Spectroscopy Solutions from UV to NIR



	UV/Vis/NIR					Raman			NIR		
Model Name	Quest X	Quest U	Glacier X	Exemplar Plus	Exemplar Plus LS	Glacier T	Exemplar T	Exemplar HT	Sol HT 1.4	Sol HT 1.7	Sol HT 2.6
Model #	BRC112P-V	BRC112P-U	BTC112E	BTC655N	BTC645N	BTC162E	BTC665N	BTC667N	BTC284N	BTC281N	BTC286N
Performance Tier	Entry	Entry	Professional	Professional	Research Grade	Entry	Professional	Research Grade	Research Grade	Research Grade	Research Grade
Detector Type	UV-enhanced Si CCD Array			Back-thinned Si CCD Array		UV-enhanced Si CCD Array	Back-thinned Si CCD Array		InGaAs Array		
# of Pixels	2048								512	512	256
Spectral Range*	350 – 1050 nm	200 – 850 nm	200 – 1050 nm	190 – 1100 nm	190 – 1100 nm	532 – 676 nm 785 – 1050 nm	532 – 687 nm 785 – 1067 nm	532 – 687 nm 785 – 1100 nm	1064 – 1450 nm	900 – 1700 nm	950 – 2550 nm
Spectral Resolution§	0.5 to 4.0 nm	0.4 to 8.0 nm	0.2 to 4.5 nm	0.28 to 5.2 nm	0.6 to 6.0 nm	4.0 cm <sup>-1</sup> @ 614 nm 4.5 cm <sup>-1</sup> @ 912 nm	4.3 cm <sup>-1</sup> @ 614 nm 4.5 cm <sup>-1</sup> @ 912 nm	4.3 cm <sup>-1</sup> @ 614 nm 4.5 cm <sup>-1</sup> @ 912 nm	10 cm <sup>-1</sup> @ 1296 nm	4.0 nm	15 nm
Operating Range	5 °C – 35 °C	5 °C – 35 °C	15 °C – 35 °C	5 °C – 35 °C	5 °C – 35 °C	15 °C – 35 °C	5 °C – 35 °C	5 °C – 35 °C	0 °C – 35 °C	0 °C – 35 °C	0 °C – 35 °C
Cooling Setpoint*	Non-cooled		14 °C†	14 °C†	0 °C†	0 °C	-2 °C	-25 °C	-20 °C†	-5 °C†	-20 °C†
Optical Design	f/# 3.6 Crossed Czerny-Turner	f/# 3.6 Czerny-Turner	f/# 3.2 Crossed Czerny-Turner	f/# 3.6 Czerny-Turner	f/# 3.0 Concave Holographic	f/# 2.2 Dual-pass Transmission	f/# 2.2 Dual-pass Transmission	f/# 2.2 Dual-pass Transmission	f/# 2.2 Dual-pass Transmission	f/# 2.2 Dual-pass Transmission	f/# 2.2 Dual-pass Transmission
Dynamic Range	300:1			50,000:1		300:1	50,000:1		14,000:1	14,000:1	12,700:1
Dimensions mm (inches)	98 x 67 x 34 (3.8 x 2.6 x 1.3)	124 x 91 x 35 (4.9 x 3.6 x 1.4)	127 x 39 x 91 (5.0 x 1.5 x 3.6)	188 x 128 x 71 (7.4 x 5.1 x 2.8)	188 x 128 x 67 (7.4 x 5.1 x 2.7)	191 x 94 x 90 (7.5 x 3.7 x 3.5)	198 x 180 x 102 (7.8 x 7.1 x 4.0)	220 x 180 x 130 (8.7 x 7.1 x 5.1)	162 x 94 x 68 (6.4 x 3.7 x 2.8)	162 x 94 x 68 (6.4 x 3.7 x 2.8)	162 x 94 x 68 (6.4 x 3.7 x 2.8)
Weight kg (lb)	0.34 (0.75)	0.37 (0.8)	0.60 (1.3)	1.6 (3.6)	1.2 (2.6)	1.8 (3.9)	2.0 (4.4)	3.4 (7.6)	1.1 (2.5)	1.1 (2.5)	1.1 (2.5)

\* Custom Ranges Available

† Deeper Cooling Available

§ Dependent on Grating and Slit Width

‡ TEC Setpoint Configurable with SDK

### Enhancements:

- ★ Custom Gratings & Slits
- ★ Long Pass Filter Option
- ★ LVF
- ★ Cylindrical Lens

### Customization:

- ★ Free Space Option

### Accessories:

- ★ Fiber Cables
- ★ Fiber Probes
- ★ Filter Holder
- ★ Light Sources
- ★ Cuvette Holders
- ★ Integrating Spheres

### Software and SDK:

- ★ Optimization of Data Collection Parameters
- ★ Powerful Data Acquisition and Data Processing
- ★ Complex Measurements and Calculations
- ★ Manual/Auto Baseline Correction

- ★ Automatic Dark Removal
- ★ Multiple Data Formats
- ★ Spectrum Smoothing

**SDK available upon request**