

Plasma Measurements



Plasmas are known for many emission peaks, located closely together. To separate these peaks, Avantes has developed multi-channel spectrometers, featuring much higher resolution than a stand-alone device. For plasma monitoring, Avantes has developed two bundles, with everything you need to measure plasma.

Typical applications:

- Semi-conductor
- Solar cells
- Razor blades
- Fusion reactors
- Glass & coatings

High-resolution Plasma Measurement

This 200 to 960 nm quad-channel spectrometer boasts an optical resolution of 0.22-0.28 nm, four times better than a standard AvaSpec-ULS2048CL-EVO covering the same range. In AvaSoft Spectroscopy Software, the four channels are combined as if you were working with only one spectrometer.

Spectrometers

4-channel desktop housing
4 x AvaSpec-ULS2048CL-EVO

Gratings:

- UC (200-450nm), 0.28 nm
- UC (450-680nm), 0.26 nm
- NC (660-830nm), 0.24 nm
- NC (820-960nm), 0.22 nm

All channels with 10 µm slit,
DCL-UV/VIS-200
OSF-600 order sorting filter (where needed)

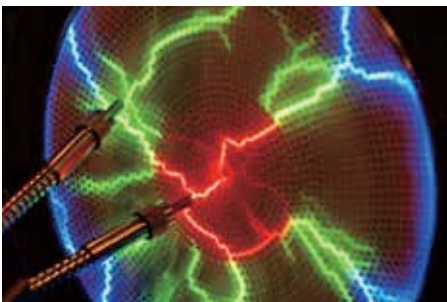
Fiber Optics

FC4-UVIR400-2-ME

Software

AvaSoft-Full
SPECline-A

Extreme High-resolution Plasma Measurement



For even higher resolution than the above-mentioned quad-channel spectrometer, this version features eight channels, with an optical resolution of up to 0.09 nm. The wavelength range is 200-930 nm, which means it detects from ultraviolet, through

visible, up to near infrared light.

The system is delivered in a 19" rackmountable enclosure.

Spectrometers

8-channel 19" rackmountable enclosure
8 x AvaSpec-ULS2048CL-EVO

Gratings:

- UE (200-300 nm), 0.13 nm
- UE (300-390 nm), 0.12 nm
- UE (380-460 nm), 0.11 nm
- UE (460-530 nm), 0.10 nm
- VE (530-588 nm), 0.09 nm
- VE (570-620 nm), 0.09 nm
- NC (620-780 nm), 0.24 nm
- NC (780-930 nm), 0.22 nm

All channels with 10 µm slit,
DCL-UV/VIS-200
OSF-600 order sorting filter (where needed)

Fiber Optics

FC8-UVIR400-2-ME

Software

AvaSoft-Full
SPECline-A