

<b>Specifications</b>	<b>FieldSpec FS 3 ST-Res</b>	<b>FieldSpec FS 3 Hi-Res</b>	<b>FieldSpec FS 3 JR</b>
Spectral Domain	350nm to 2500 nm	350nm to 2500 nm	350 - 2500 nm
Spectral Resolution	<b>3 nm at 700 nm and 10 nm at 1400 nm and 2100 nm</b>	<b>3 nm at 700 nm and 8.5 nm @ 1400 nm and 6.5 nm @ 2100 nm.</b>	<b>3 nm at 700 nm and 30 nm at 1400 nm and 2100 nm</b>
Noise Equivalent Delta Radiance NEDR	For standard 1.5 m fiberoptic cable: 1.1 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 700 nm, 2.4 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 1400 nm, 4.7 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 2100 nm.	For standard 1.5 m fiberoptic cable: 1.1 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 700 nm, 2.8 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 1400 nm, 5.6 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 2100 nm.	For standard 1.5 m fiberoptic cable: 1.1 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 700 nm, 2.4 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 1400 nm, 4.7 x 10 <sup>-9</sup> W/cm <sup>2</sup> /nm/sr @ 2100 nm.
Sampling Interval	1.377 nm for 350 - 1000 nm and 2 nm for 1000 - 2500 nm		
Data Collection Speed	0.1 seconds single spectrum acquisition, about 1.5 seconds for 10 spectra averaging.		
Set-up Opt. Speed	About 8.5 to 14 seconds initial optimization depending upon illumination.		
Dispersion Element & Dectector	Fixed reflective holographic diffraction grating, 512 element silicon photo-diode array with high order blocking filter, 2 X fast scanning reflective holographic diffraction grating and a TE cooled "graded index" InGaAs photo-diode with high order blocking filter, internal shutters, and ASD's proprietary DriftLock® automatic offset correction.		
Input	25 deg full conical angle fiberoptic cable 1.5m long		
Maximum Radiance	well in excess of twice those for a 0 deg solar zenith angle and a 100% reflectance Lambertian surface		
Other Built in Features	ASD proprietary Fiber checker system & test optic, accessory auxiliary power jack, 10/100Base T Ethernet interface, wireless Wi-Fi interface, fiberoptic cable storage pouch & spool, battery power level indicator , run-time meter, TE-cooler stability indicators, dust-proof EMI sealed enclosure with high reflectance finish and protective urethane end-caps.		
Weight	(approximate): spectrometer 5.6 kg, battery pack 1.2 kg, backpack 2.4 kg, controller computer 1.6 kg		
Sizes	spectrometer 12.7 x 35.6 x 29.2cm,		
Power	12VDC 9000 mAH NiMh high current rechargeable battery pack for about 4 to 9 hour output depending upon instrument model, battery age, ambient temperature, and attached accessories (8 hour charge time on fully discharged battery). 350-2500 nm spectrometer power requirement is 25 Watts. When running the 350-2500 nm spectrometer together with an accessory on the auxiliary power jack the power requirement can be as high as 60 Watts maximum for certain accessories. An external AC/DC power system is also included and is rated at 90-240VAC 50/60Hz (automatic selection) input and 5A DC output, with over-current protection.		
Temperature range	0 to 40 C° operating, -15 to 45 deg C° storage.	0 to 40 C° operating, -15 to 45 deg C° storage.	0 to 40 C° operating, -15 to 45 deg C° storage.