B Specifications

Physical specifications

Attribute	Specification
Height	20.8 cm (8.2 inches)
Depth	50.3 cm (19.8 inches)
Width	28.4 cm (11.2 inches)
Weight	13.61 kg (30 pounds)

Environmental specifications

Attribute	Specification
Operating temperature	4 to 40 °C (39.2 to 104 °F)
Operating humidity	20 to 80%, noncondensing
Shipping and storage temperature	–40 to 70 °C (–40 to 158 °F)
Shipping and storage humidity	20 to 80%, noncondensing

Electrical specifications

Attribute	Specification
Protection class[a]	Class I
Overvoltage category[b]	II
Pollution degree[c]	2
Moisture protection[d]	Normal (IPXO)
⚠ Line voltages, nominal	Grounded AC, 120 V, 240 V, ±10%

Electrical specifications (Continued)

Attribute	Specification
Altitude	2000 m (6561.6 feet)
Line frequency	50/60 Hz
Fuse ratings	Two fuses: 100 to 240 VAC, 50 to 60 Hz F 3.15 A, 250 V FAST BLO, 5 × 20 mm (IEC)
Power consumption	280 VA (nominal)
Two attenuated analog output channels: 1 VFS	Attenuation range: 1 to 100,000 EUFS 1V output range: –0.1 to +1.1 V
Two event outputs	Type: Contact closure Voltage: +30 V Current: 1 A
Four event inputs	Input voltage: +30 V maximum 100 ms (minimum period)

a. **Protection Class I** – The insulating scheme used in the instrument to protect from electrical shock. Class I identifies a single level of insulation between live parts (wires) and exposed conductive parts (metal panels), in which the exposed conductive parts are connected to a grounding system. In turn, this grounding system is connected to the third pin (ground pin) on the electrical power cord plug.

b. **Overvoltage Category II** – Pertains to instruments that receive their electrical power from a local level such as an electrical wall outlet.

c. **Pollution Degree 2** – A measure of pollution on electrical circuits, which may produce a reduction of dielectric strength or surface resistivity. Degree 2 refers only to normally nonconductive pollution. Occasionally, however, expect a temporary conductivity caused by condensation.

d. **Moisture Protection** – Normal (IPXO) – IPXO means that *no* Ingress Protection against any type of dripping or sprayed water exists. The X is a placeholder that identifies protection against dust, if applicable.

Performance specifications

Attribute	Specification
Wavelength range	Ex: 200 to 890 nm Em: 210 to 900 nm
Bandwidth	20 nm (maximum)
Wavelength accuracy	±3 nm

Performance specifications (Continued)

Attribute	Specification
Wavelength repeatability	±0.25 nm
Sensitivity, single channel	Ex: 350 nm Em: 397 nm (Signal-to-noise ratio of water Raman peak ≥1000. Hamming filter TC = 1.5 sec)
Sensitivity setting range	1 to 100,000 EUFS
Filter setting range	Single-channel: 0.1 to 5.0 seconds, Hamming (default) 0.1 to 99 seconds, RC Multichannel: 1 to 50 seconds, Hamming (default) 1 to 99 seconds, RC
Optical Component Specifications	
Lamp source	Xenon arc lamp (150 W)
Flow cell	Axial Illuminated Flow Cell design
Cell volume (illuminated)	8 µL (standard analytical)
Pressure limit	145 psi (flow rate not to exceed 5 mL/min)
Materials	316 stainless steel, fused silica, Teflon®