

Brewer Mk III



Brewer Mk III has a unique design of spectrometer that is self-compensating for the expansion and contraction of components caused by changes in temperature. This means that it can be used around the world outdoors without the need for complex temperature stabilisation. The Mk III 'double' Brewer uses two of these spectrometers in series for improved ultraviolet measurement accuracy, into the UVC band. There are built-in wavelength and sensitivity check lamps.

The Brewer has an integrated sun tracker and makes measurements at specific wavelengths to determine the total column Ozone and Sulphur Dioxide in the atmosphere. It also has the capability to make high resolution UV spectral scans of the direct solar radiation and the global radiation. The software can accurately calculate UVA, UVB, UVE (Erythema) and UVI (Index). The Brewer must be connected to a PC running the operating software in order to make measurements and store data.

Article	Part number
Brewer Mk III 230 VAC for UV, Ozone and SO ₂	0361900
Brewer Mk III 115 VAC for UV, Ozone and SO ₂	0361901

Specifications

Measurement principle	Unique self-compensating dual Ebert spectrometers
Detector	UV-enhanced photo-multiplier tube (PMT)
Sun Tracker	Integrated, includes heavy duty tripod stand
Supply voltage	115 or 230 VAC, 50 - 60 Hz
Operating temperature range	-20 °C to +40 °C -50 °C to +40 °C (with optional insulated cold cover)
Wavelength range	286.5 nm to 363 nm
Resolution / stability	0.6 nm / ± 0.1 nm
Ozone and SO ₂ measurement wavelengths	303.2 nm • 306.3 nm • 310.1 nm 313.5 nm • 316.8 nm • 320.1 nm
Column Ozone measurement accuracy	± 1%
UV measurement	Direct sun or global, UVA, UVB, UVE and UVI
Communication	RS 232 or RS 422 to PC (not included) running operating software
Software, DOS	Operation Brewer, data storage and analysis

Accessories for Brewer Mk III	Part number
UV-B Stability Kit external UV calibration lamp kit	BA-C 126
Insulated Cold Cover extends operation to -50 °C	BA-C 210
Aluminium Transit Case foam lined	BM-C 206