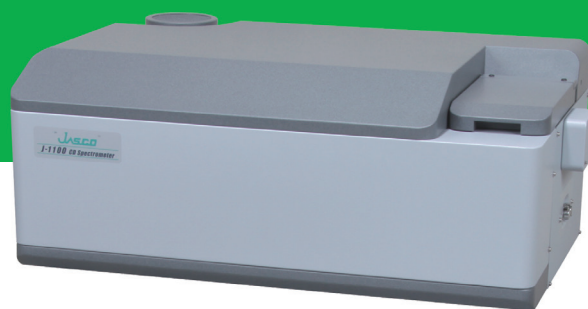


# J-1100

## CD Spectrometer



## Specifications

### [Hardware]

Light source:	150 W air-cooled Xenon lamp
Detector:	Head-on photomultiplier tube PMT
Monochromator:	Double-prism monochromator, Czerny-Turner mount
Modulator:	Photoelastic modulator
Measurement wavelength range:	180 to 600 nm
Wavelength accuracy:	$\pm 0.2$ nm from 180 to 250 nm, $\pm 0.4$ nm from 250 to 500 nm $\pm 0.8$ nm from 500 to 600 nm
Wavelength repeatability:	$\pm 0.05$ nm from 180 to 500 nm, $\pm 0.1$ nm from 500 to 600 nm
Spectral bandwidth:	1 nm
Slit width:	1 to 4000 $\mu$ m
Digital Integration Time (D.I.T.):	8 msec. to 8 sec.
Scanning mode:	Continuous scan, Step scan, Auto response (D.I.T) scan
Scanning speed:	up to 5000 nm/min (when using continuous scan)
Photometric Mode:	CD, LD, Transmittance, Absorbance, HT voltage, DC voltage, External input (Temperature, PH, etc. are available)
CD full scale:	$\pm 8000$ mdeg
CD resolution:	0.00001 mdeg
Wavelength resolution:	0.025 nm (when using continuous scan)
Stray light:	Not more than 0.0003% (at 200 nm)
RMS noise:	0.03 mdeg (at 200 nm, at 500 nm, D.I.T. 8 sec)
Baseline stability:	0.05 mdeg/hr
LD measurement:	Full scale $\pm 1\Delta OD$ / Resolution 0.000001 $\Delta OD$
UV measurement:	Single beam measurement / Photometric range: 0 to 5 Abs Photometric accuracy: $\pm 0.01$ Abs (0 to 1 Abs, checked using NIST SRM 930 filter)
External input terminal:	Two channels (input range: -1 to 1 V DC)

Mercury lamp	Used for the instrument inspection
Shutter	Located the light source unit
Standard cell holder:	CH-434 cylindrical/rectangular cell holder
Available cells:	Cylindrical cell: Optical pathlength 0.1 to 20 mm, O.D. 22 mm Rectangular cell: Optical pathlength 1 to 20 mm, optical pathwidth 10 mm
Sample chamber:	105 (W) × 150 (D) × 110 (H) mm, Exists the water inlet/outlet ports
Dimensions/Weight:	740 (W) × 545 (D) × 325 (H) mm, 70 kg
Power requirements:	AC 100 to 240 V, 50/60 Hz, 360 VA
[Data processing]	
Software:	JASCO Spectra Manager Ver. 2.5 <sup>*1</sup>
Operating system:	Windows® 11 Pro
CD data processing:	CD K-K transform, HT-OD conversion, CPL calculation, G value calculation, Sample Information edition, ORD-E Data correction, Optical constant calculation, Error bar view, r-P transform, pH axis transform
Standard program:	Spectra Measurement, Time Course Measurement, Interval Scan Measurement, Data Monitor, Validation, JASCO Canvas, Spectra Analysis, Interval Data Analysis, MCD Hysteresis Analysis, ORDE-521 Data Correction Variable Temperature Measurement <sup>*2</sup> , Temperature Interval Scan Measurement <sup>*2</sup> , Temperature/Wavelength Scan Measurement <sup>*2</sup>
Optional program:	qHOS program, BeStSel program, Denaturation analysis (includes Thermal denaturation multi analysis), Analog output module (non-CFR only), Macro command (non-CFR only)
[Installation requirement]	
Operation temperature/humidity:	15 to 30 °C, less than 85 %
Nitrogen gas purging:	Light source unit, monochromator unit, and sample chamber 2 L/min (more than 185 nm) 5 L/min (more than 180 nm)

\*1 JASCO can provide Spectra Manager Ver. 2.5 CFR which is compliant with FDA 21 CFR PART 11

\*2 These programs are provided with dedicated accessories.

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Products described herein are designed and manufactured by ISO-9001 and ISO-14001 certified JASCO Corporation



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