



Zuzi-CHEMetrics visible spectrophotometer

Code HJB008 | 4265/50 model

Model specifically designed for water and wastewater analysis using CHEMetrics instrumental Vacu-vials® and COD test kits. It is programmed with more than 40 methods spanning 23 analytes. The programs provide direct read test results in mg/L (ppm).

The 4265/50 model can also be used in other applications, as it is equipped with an adjustable cuvette holder and has three other working modes: photometric, quantitative and scanning.



Model	4265 / 50
Reference	HJB008
Optical system	Single beam, 1200 lines / mm grating
Wavelength range	320 - 1100 nm
Wavelength accuracy	± 0.5 nm
Wavelength repeatability	≤ 0.2 nm
Wavelength resolution	0.1 nm
Wavelength swing speed	10000 nm / min
Wavelength scanning speed	20-4200 nm / min
Light source	Tungsten lamp
Spectral bandwidth	2 nm
Detector	Silicon photodiode
Photometric range	-0.3 -3 A 0 - 200 % T 0 - 9999.9 C
Modes	Photometry, quantitation, spectrum, user program
Sample compartment	Manually driven two-position sample holder: tube holder and adjustable cuvette holder. Ampoules / Tubes: Ø 13 - 16 mm, height 45 - 110 mm Cuvettes: 10 / 20 / 30 / 50 mm
Display	5 - inch TFT color touch screen
Storage	236 KB (built-in), unlimited by external USB
Interface	RS232 serial port × 1 (printer), USB-A × 1 (USB memory / USB printer), USB-B × 1 (PC)
Power supply	100 - 240 VAC, 50 / 60 Hz, 75 W
Dimensions (LxWxH)	450 x 370 x 187 mm
Weight	10.5 kg



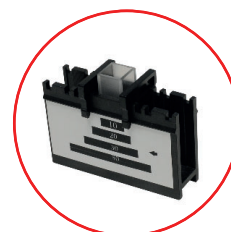
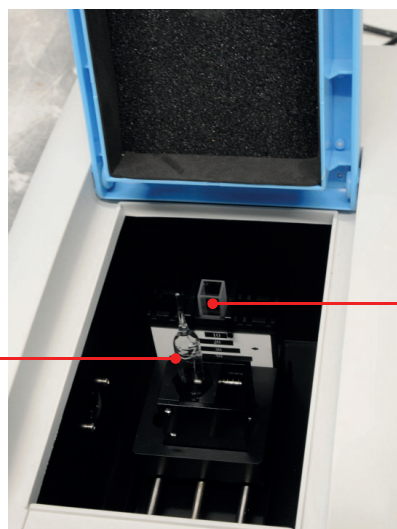
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- Optimized optical system design ensures higher measurement accuracy.
- Cast aluminum base and molded plastic housing provide increased strength and durability.
- Improved wavelength accuracy and repeatability and noise reduction due to the new wavelength control mechanism (patented).
- High-resolution TFT color LCD touch screen provides excellent display effect and easy operation.
- Auto-calibration and countdown of preheating at start-up.
- File management function.
- Automatic wavelength setting.
- Can be connected to a printer for direct output of measurement results.
- EasyUV Basic PC software included. Optional EasyUV software (not included).
- IQ / OQ / PQ protocols available.



Test tube holder
Diameter : $\varnothing$ 13 - 16 mm
Height : 45 - 110 mm



Cuvette holder
10 / 20 / 30 / 50 mm

Functions

Photometry

- A / % T / E conversion
- Results can be recorded, renamed, deleted, saved, and printed

Quantitation

- Single wavelength, dual wavelength (difference, ratio)
- Three ways to establish a standard curve (input coefficients, measure 2-10 standard samples or input absorbance and concentration values of standard samples)
- Three fitting methods (linear through zero, linear, quadratic)
- Standard curves can be saved and loaded
- 19 built-in common concentration units and user-defined units (up to 8 characters)
- Results can be recorded, renamed, deleted, saved, and printed



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Functions

Spectrum

- The scanning speed is optional (low, medium, high)
- The scanning interval is optional (0.1, 0.2, 0.5, 1.0, 2.0, 5.0, 10.0 nm)
- A / % T display mode can be switched
- Automatic peak search
- Point by point (peak) view
- Adaptive and modifiable coordinates
- Curves and data can be deleted, saved, and printed

User Program

- Allows access to the 44 methods programmed to work with the CHEMetrics instrumental kits (see the list of methods below)

File

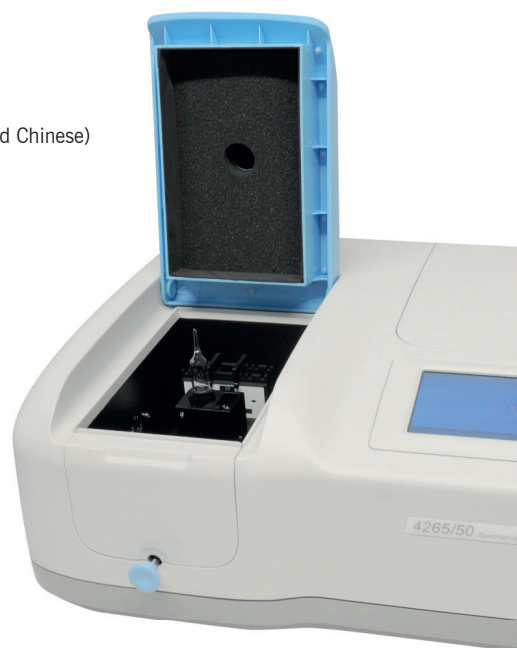
- Files can be deleted, renamed, batch imported/exported, converted to .txt and .csv format

System

- System calibration (dark current, wavelength, system baseline)
- Light source management (light source switch, timing)
- Clock
- Memory management (storage status display, formatting)
- Six languages can be switched (English, Spanish, French, Portuguese, German, simplified Chinese)
- General setting (beep, brightness, close display after, sample holder)
- Restore defaults
- About (system information)

Performance verification

- Wavelength accuracy
- Photometric accuracy
- Stray light
- Noise
- Dark noise
- Stability
- Spectral bandwidth





List of programmed methods and corresponding test kits

Prog.	Analyte	CHEMetrics cat. No.	Auxilab code	Cell Size mm	Blank Y/N	Wavelength, nm	Range (ppm)	Method
1	Ammonia	K-1413	NBC009	13	N	610	0,20 – 3,00	Hydroxybenzyl Alcohol
2		K-1413	NBC009	13	N	610	4,00 – 60,0	Hydroxybenzyl Alcohol
3		K-1503	NBC010	13	N	430	0,50 – 7,00	Direct Nesslerization
4		K-1513	NBC036	13	N	430	0,50 – 10,00	Direct Nesslerization (extended shelf-life)
5		K-1513	NBC036	13	N	430	7,5 - 150	Direct Nesslerization (extended shelf-life)
6		K-1523	NBC011	13	N	430	1,5 – 14,0	Direct Nesslerization
7	Chloride	K-2103	NBD016	13	Y	455	2,5 – 40,0	Ferric Thiocyanate
8	Chlorine	K-2513	NBD009	13	N	515	0,40 – 5,00	DPD
10	Chlorine Dioxide	K-2703	NBD018	13	N	540	0,8 – 11,0	DPD + Glycine
11	Chromate	K-2803	NBR002	13	N	485	0,20 – 3,50	Diphenylcarbazide
12	Copper	K-3503	NBP002	13	Y	600	0,25 – 7,00	Bathocuproine
13	Cyanide	K-3803	NBG020	13	N	560	0,040 – 0,400	Isonicotinic/Barbituric Acid
14	DEHA	K-3903	NCH003	13	N	470	0,15 – 2,00	PDTS
15	Hydrogen Peroxide	K-5543	NBB008	13	N	505	0,50 – 6,00	Ferric Thiocyanate
16	Iron	K-6003	NBJ009	13	N	505	0,30 – 6,00	Phenanthroline
18		K-6203	NBJ011	13	N	505	0,30 – 6,00	Phenanthroline
19	Manganese	K-6503	NBS003	13	N	520	2,0 – 30,0	Periodate
20	Molybdate	K-6703	NBT004	13	N	400	1,0 – 25,0	Catechol
21	Monochloramine	K-6803	NCL005	13	N	690	0,50 – 8,00	Hydroxybenzyl Alcohol
22	Nitrate	K-6903	NBG007	13	N	520	0,20 – 1,50	Cadmium Reduction
23		K-6913	NBG008	13	N	520	0,20 – 1,50	Zinc Reduction
24		K-6923	NBG009	13	N	520	1,00 – 7,50	Cadmium Reduction
25		K-6933	NBG010	13	N	520	5,0 – 50,0	Cadmium Reduction
26		K-7003	NBG018	13	N	520	0,08 – 1,00	Azo Dye Formation
27		K-7013	NBG046	13	N	520	0,020 – 0,750	Azo Dye Formation (NED)
28	COD, LR	K-735X	NDB001_004	16	Y	420	10 – 150	Dichromate Reactor Digestion
29	COD, HR	K-736X	NDB005_008	16	Y	620	30 – 1500	Dichromate Reactor Digestion
30	COD, HR+	K-737X	NDB009_012	16	Y	620	300 – 15000	Dichromate Reactor Digestion
31	Ozone	K-7423	NBF001	13	N	515	0,20 – 5,00	DPD
32	Oxygen	K-7513	NBH007	13	N	520	2,0 – 15,0	Indigo Carmine
33		K-7553	NBH008	13	N	520	0,100 – 1,000	Rhodazine D™
34	Peracetic Acid	K-7913	NCD001	13	N	515	0,40 – 5,00	DPD
35	Phenols	K-8003	NCB006	13	N	505	0,40 – 8,00	4-Aminoantipyrine
36		K-8023	NCB007	13	N	505	1,0 – 20,0	4-Aminoantipyrine
37	Phosphate	K-8503	NBK009	13	N	420	5,0 – 80,0	Vanadomolybdo- phosphoric Acid
38		K-8513	NBK008	13	N	690	0,30 – 5,00	Stannous Chloride
39	Silica	K-9003	NBM003	13	N	815	0,25 – 4,00	Heteropoly Blue
40	Sulfate	K-9203	NBL013	13	N	420	25,0 – 100,0	Turbidimetric
41		K-9503	NBL006	13	N	660	0,10 – 1,00	Methylene Blue
42		K-9523	NBL007	13	N	610	0,60 – 6,00	Methylene Blue
43	Zinc	K-9903	NBV001	13	Y	620	0,30 – 3,00	Zincon
44		K-9923	NBV002	13	Y	620	1,5 – 15,0	Zincon