

## Spectrophotometers LAN.OPTICS 1100 series – visible wavelength



Provides digital readouts in direct concentration units, absorbance or percent transmittance (model 1103) and concentration measurement in model 1104RS, with RS232 interface enables the spectrophotometer to be connected to a PC or printer.

Technical data:

Model	1103	1104 RS
Reference	76110	76111
Spectral slit width:	6 nm	
Optical system:	Single beam, grating system 1200 line/mm	
Wavelength range:	325-1000 nm	
Wavelength accuracy:	2 nm	
Stray radiant energy:	< 1 %T a 340 nm	< 0,5%T a 340 nm
Photometric range:	0-125,0% T	
- Transmittance	0-2,5 A	
- Absorbance	0-1999 C (0-1999F)	
- Concentration		
Photometric accuracy:	2%T	1%T
Zero:	YES	YES
Cell holder:	For cells of 10 mm	
External connections:	Analogic	Analogic + RS232C
Light source:	Halogenous lamp 6V-10 Wat	
Size (Width x height x depth):	316x270x135 mm	
Weight:	4,5 Kg	
Power supply:	115-230 V - 50/60 Hz adjustable	



76110 Spectrophotometer visible 1103

76111 Spectrophotometer visible 1104 RS

### Accessories:

76210 Halogenous lamp for 1100 series

76220 Glass cell 10x10x45 mm

76240 Quartz cell 10x10x45 mm



Spectrophotometer LAN.OPTICS serie 2000 and 2100.

Spectrophotometer visible (2000) and UV-VIS (2000 UV AND 2100 UV).

Microprocessor controlled, 2000 and 2100 series give a high resolution and sensibility.

LCD display with 2-lines and 20 characters, to readout analytic datas.

Maximum accurate for all kind of applications, with a spectral slit width of 5 nm (2000 serie) and 4 nm (2100 serie) and repeatability of 1 nm.

Digital setting of wavelength and direct realization of T and A measurements with C and Factor readout. Standard cell holder for 4x10mm cells with external changer. Large cells holder compartment which accepts cells up to 100 mm.

Analogic outlet for recorder and RS232C interface to connect the equipment to a PC or printer.

*Technical data:*

Model	2000UV	2100-VIS	2100UV
<b>Spectral slit width:</b>	5 nm	4 nm	4 nm
<b>Optical system:</b>	Single beam, grating system 1200 line/mm		
<b>Wavelength range:</b>	200-1000	320-1000	190-1000
<b>Wavelength precision:</b>	1 nm	1 nm	1 nm
<b>Wavelength accuracy:</b>	2 nm	2 nm	2 nm
<b>Stray radiant energy:</b>	< 0,5%T 220 y 340 nm	<0,1%T 340 nm	<0,1%T 220 y 340 nm
<b>Photometric range:</b>			
– Transmittance	0-125,0 %T		
– Absorbance	0 - 2,5 A		
– Concentration	0-1999 C 0-1999F)		
<b>Photometric accuracy:</b>	0,008A @ 0,5A	0,004 @ 0,5A	0,004A @ 0,5A
<b>Zero:</b>	YES	YES	YES
<b>Cell holder:</b>	4 cells of 10 mm		
<b>External connections:</b>	Analogic + RS232C		
<b>Light source:</b>	Halogenous and Deuterio	Halogenous	Halogenous and Deuterio
<b>Size (Width x height x depth):</b>	465x365x175 mm		
<b>Weight:</b>	11,5 Kg	8,5 Kg	11,5 Kg
<b>Power supply:</b>	115-230 V/50-60 Hz adjustable		

Software Win 9X included: % transmittance, Absorbance and concentration measurements either allow Absorbance/time measures and realice standard curves.

Wide range of accessories available upon request.

Code	Models	Price
76201	Spectrophotometer UV-visible 2000 UV	
76202	Spectrophotometer 2100 visible	
76211	Spectrophotometer UV-visible 2100.UV	

#### Accessories:

- 76310 Halogenous lamp for 2000 and 2100 series
- 76220 Glass cell 10x10x45 mm
- 76240 Quarz cell 10x10x45 mm
- 76320 Deuterio lamp
- 76350 Holmio filter
- 76353 Dydimium filter
- 76360 Peltier kit
- 76365 Water jacket for cell



## Scanning spectrophotometer UV-VIS model PG-1800

### Main functions:

Absorbance, transmittance, direct concentration, correction curve with 8 standard, spectrum treatment, arithmetical computations, logarithmics, 1st to 48 derivate conversion of Abs to /or from T%, measures and kinetic curves, data storage and its posterior treatment, 10 spectrum channels, chart print.

Scanning in absorbance and transmittance along the differents wavelengths with peaks obtaining.

Direct concentration measurements throught the factor entering.

Automatic motorized cell – holder with 8 positions, it allows 7 simultaneous measures respect to one "blank".



Optical system:	
	High resolution monochromer, grating of holographic diffraction
<b>Wavelength range:</b>	200-1100 nm
<b>Spectrum bandwidth:</b>	2 nm
<b>Strays light:</b>	0,3%T 220 nm
<b>Wavelength precision:</b>	0,5nm (with auto-correction)
<b>Reproducibility:</b>	0,2nm
<b>Photometric range:</b>	-0,3 a 3.0Abs (0-200%T) (0
<b>Accuracy:</b>	0,002 Abs (0-0,5Abs) and 0,004 Abs (0,5-1,0 Abs) 0,3°/fIT (0-100%T)
<b>Repeteability:</b>	0,15% T (0-100%T), 0,001Abs (0-0,5Abs) and 0,002 Abs (0,5-1,0 Abs)
<b>Stability:</b>	0,004 Abslh (500 nm after heating)

Self-diagnostic system and auto-calibration of wavelenght when the equipment start working.

Motorized cell-holder for 8 cells.

Silicon diode detector.

Lighting with halogenous lamp and Deuterio lamp

Self-change of lamps.

Printers with paralel output can be connected.

Refer: 76800	SCANNING SPECTROPHOTOMETER PG.1800
<b>Dimensions:</b>	540x400x250 mm
<b>Weight:</b>	25 Kg
<b>Voltage:</b>	230V/50Hz