VISIBLE SPECTRUM SPECTROPHOTOMETER

DR3900 Benchtop VIS Spectrophotometer with RFID Technology*

Simple Preparation

TNTplus vials use DosiCaps - freeze-dried reagents integrated into sealed cap - that are easier to use than Powder Pillows or Liquid Reagents, without any risk of contamination.
The boxes and vials are color-coded for a fast and easy parameter and range recognition of exactly the test you need. Step-by-step illustrated test methods are printed on the box as a quick reference and can also be called up in the instrument menu.

Fast Execution

A 2D barcode on the TNTplus vial is automatically read by the Hach DR spectrophotometer to identify the appropriate method and take the measurement. The vial spins to take 10-fold absorbance readings that will be averaged for result determination to exclude scratches and fingerprints. Instrument calibration verification and high instrument stability all combine to eliminate the need to run reagent blanks.

Comprehensive Documentation

Measurement results are documented on the detailed level with timestamp, operator ID, absorbance reading, and calculated concentration. The 2D barcode delivers the lot number and expiry date, logged with every result.

For your accreditation the certificate of analysis can be called up just by wiping the reagent box towards the RFID* sensor.

*RFID technology currently available in US, Canada, Puerto Rico, Australia, New Zealand, and Colombia only.

Specifications

Beam Height	: 10 mm
Data Logger	: 2000 measured values (Result, Date, Time, Sample ID, User ID)
Dimensions (H x W x D)	: 151 mm x 350 mm x 255 mm
Display	: 7" TFT
Display Resolution	: WVGA (800 pix x 480 pix)
Display Size	: 7 inch
Display Type	: Colored touch-screen
Enclosure Rating	: IP30
Includes	: Adapter "A" for 1" round + Accuvac/1 cm rectangular cuvettes, manual in m 5 languages (GB, D, F, I, E), power supply 100 - 240V, 47 - 63Hz.Light Source:Gas-filled Tungsten (visible)

Manual Languages	: English French (CDN) Spanish (SA) Portuguese (BR) Chinese Japanese Korean
Max. Operating humidity	: 80 %
Max. Storage Humidity	: 80 %
Operating Conditions	: 10 °C to 40 °C
Operating Mode	: Transmittance (%), Absorbance and Concentration, Scanning
Optical System	: Reference beam, spectral Reference beam, spectral
Photometric Accuracy	: 5 mAbs at 0.0 to 0.5 Abs
Photometric Accuracy 2	: 1 % at 0.50 to 2.0 Abs Photometric Linearity :< 0.5 % to 2 Abs
Photometric Linearity 2	: ≤ 0.01 % at >2 Abs with neutral glass at 546 nm
Photometric Measuring Range	: ± 3.0 Abs (wavelength range 340 to 900 nm)
Power Requirements	: With external power supply Power Requirements (Hz):50/60 HzPower Requirements
(voltage)	: 110 - 240 V AC
Power Supply	: Benchtop Power Supply
Preprogrammed Methods	: > 240
Sample Cell Compatibility	: 13 mm round, 16 mm round, 1 cm & 5 cm rectangular, 1" round, 1" rectangular
Scanning Speed	: 8 nm/S (in steps of 1 nm) Spectral Bandwidth: 5 nm ± 1 nm
Storage Conditions	: -30 °C to 60 °C
Stray Light	:< 0.1 % T at 340 nm with NaNO2
User Interface Languages	: Bulgarian, Chinese, Croatian, Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Korean, Polish, Portuguese - Brazil, Portuguese, Russian, Serbian, Slovakian, Slovenian, Spanish, Swedish, Turkish
User Programs	: 100
Warranty	: 12 months
Wavelength Accuracy	: ± 1.5 nm (wavelength range 340 to 900 nm)
Wavelength Calibration	: Automatic
Wavelength Range	: 320 to 1100 nm
Wavelength Reproducibility	: ± 0.1 nm
Wavelength Resolution	: 1 nm
Wavelength Selection	: Automatic, based on method selection
Weight	: 9.26 lbs. (4.2 kg)