



Spectrophotometers

Evolution 300 UV-Vis



The Evolution 300 is the next generation UV-Vis spectrophotometer offering ease of use and powerful performance to meet the challenges of your laboratory. The system's legacy spans over 60 years of UV-Vis experience. Built on proven technology, the Evolution 300's entirely new platform includes innovative features to maximise productivity in your lab.

Product Features

- Double-beam design provides great stability and low drift, ensuring reliable results
- High-resolution, variable bandwidth for optimal instrument settings
- Premium-quality optics offer high throughput and sensitivity
- Smart Accessories™ simplify sampling and enhance productivity

- Comprehensive Local Control and/or PC control options meet multiple laboratory needs
- Complete validation, qualification and calibration tools for full regulatory compliance

The Evolution 300 is a versatile system that provides complete tools and functionality for a wide variety of applications, including QC, pharmaceutical, life science and more.



Specifications

| Model | Evolution 300 |
|---|--|
| Wavelength Range, nm | 190 to 1100 |
| Photometric Range | 6.0A |
| Photometric Display | -3.0 to 6.0A |
| Detector | Photodiode |
| Bandwidth | Variable 0.5, 1.0, 1.5, 2.0, 4.0 nm |
| Best Data Resolution | 0.1 nm |
| Scan Speeds | 1 to 3800 nm/min |
| Monochromator drive Speed | 4000 nm/min |
| Wavelength Accuracy (using holmium and didymium traceable to National Physical Laboratory (NPL), 190 to 1100 nm) | ±0.3 nm (Typical: ±0.1 nm) |
| Wavelength Repeatability (across complete wavelength range using holmium and didymium traceable to NPL (Typical - 10 scans of 253.65 Mercury line)) | ±0.1 nm (Typical: ±0.03 nm) |
| Photometric Accuracy (at 546nm using neutral density glass filters traceable to NPL) | ±0.004A (Typical ±0.0015A) @ 1A. ±0.006A (Typical ±0.0020A) @ 2A ±0.012A (Typical ±0.0025A) @ 3A |
| European Pharmacopoeia Photometric Accuracy (accuracy test with potassium dichromate) | 235 nm: 0.748 ±0.010A; 257 nm: 0.865 ±0.010A 313 nm: 0.292 ±0.010A; 350 nm: 0.640 ±0.010A |
| Photometric Repeatability (at 546 nm using neutral density glass filters traceable to NPL) | 1A: ±0.002A, 2A: ±0.004A. 3A: ±0.008A |
| Peak-to-Peak Noise | 0A at 1.5 nm: <0.0003A (Typical <0.0002A); 1A at 1.5 nm: <0.0004A (Typical <0.0002A) |
| Stray Light | KCl solution at 200 nm: >2.0A (Typical: >2.5A); NaI solution at 220 nm: <0.02%T (Typical: <0.005%T); NaNO ₂ solution at 340 nm: <0.02%T (Typical: <0.005%T) |
| Baseline Flatness (200 to 800 nm) | ±0.001A (Typical: ±0.0009A); >0.0005A/hr (Typical: ±0.0002A/hr) |
| Stability at 340 nm | |
| Dimensions H x W x D mm | 380 x 610 x 530 |
| Weight kg (lbs) | 22 (48.5) |
| Electrical Supply | 100-240V, 50-60Hz |

Ordering Information

Cat No.
10300201 / 10300401

Internal Graphic Printer
Optional / Included