

Digital Photo Fluorometer



A digital photofluorometer is an analytical instrument used to measure the fluorescence intensity of a sample. It is widely used in chemical, biological, and environmental research to detect and quantify fluorescent compounds. Here's a brief overview:

Key Features:

1. **Principle:** It works by exciting a sample with light at a specific wavelength (excitation) and measuring the emitted light at a longer wavelength (emission).
2. **Digital Detection:** Uses photodetectors (e.g., photomultiplier tubes or CCD sensors) to convert fluorescence signals into digital data for precise measurement.
3. **Applications:**
 - Quantitative analysis of fluorescent dyes, proteins, and biomarkers.
 - Environmental monitoring (e.g., detecting pollutants).
 - Pharmaceutical and biochemical research.
4. **Advantages:**
 - High sensitivity and specificity.
 - Wide dynamic range for concentration measurements.
 - User-friendly digital interface for data analysis.
5. **Components:**
 - Light source (e.g., LED or laser).
 - Monochromators or filters for wavelength selection.

- Sample chamber.
- Digital display or software for data output.