

# Fluorescence Accessories

## OmniFluo900 research-platform configuration guide

Select the excitation, detector and sample environment around the experiment. This guide groups the published options by function; it is not a list of equipment included in every system.



*Microsecond xenon flash excitation. Select source and acquisition timing for the instrument configuration.*

### Browse by function

#### Excitation Light Sources

Broadband microsecond excitation for configured fluorescence and phosphorescence measurements.

#### PMTs & Spectral Detectors

Choose spectral coverage, cooling and readout for the emission band and signal level.

#### Sample Holders & Liquid Handling

Control orientation, mixing and liquid-sample conditions at the measurement position.

#### Cryostats & Temperature Control

Study temperature-dependent emission with a liquid-nitrogen cryostat.

### Planning a configuration

Provide the instrument model, excitation and emission wavelengths, sample format, timing and temperature requirements. These accessories are listed for OmniFluo900 research platforms; do not assume compatibility with other instruments.

[www.precisometer.com/spectroscopy/fluorescence/accessories](http://www.precisometer.com/spectroscopy/fluorescence/accessories)

## Excitation Light Sources

Broadband microsecond excitation for configured fluorescence and phosphorescence measurements.

### Published configurations

| Option                              | Configuration and published parameters                                                                                                                                                            |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Microsecond Xenon Flash Lamp</b> | Broadband pulsed excitation, principally used over the UV and visible range. Output range: 190–2000 nm; principal use 200–800 nm; Pulse width: 2.9 µs; Typical repetition rate: 60 Hz; adjustable |

*Selection: Specify the excitation band, pulse duration and timing interface needed by the acquisition system.*

## PMTs & Spectral Detectors

Choose spectral coverage, cooling and readout for the emission band and signal level.

### Published configurations

| Option                                      | Configuration and published parameters                                                                                                                                                             |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UV–NIR PMT Detector Assemblies</b>       | Cooled detector assemblies for ultraviolet through near-infrared fluorescence, with selectable internal PMT tubes. R13456 range: 185–980 nm; R2658 range: 185–1010 nm; Cooling temperature: –10 °C |
| <b>InGaAs &amp; InSb Analogue Detectors</b> | Cooled single-element detectors for near- and mid-infrared emission. TE-cooled InGaAs: 800–1700 nm or 800–2600 nm; –40 °C; Liquid-nitrogen-cooled InSb: 1000–5500 nm; 77 K                         |

*Selection: Confirm the usable spectral range of the complete optical path, along with analogue or photon-counting acquisition compatibility.*

## Sample Holders & Liquid Handling

Control orientation, mixing and liquid-sample conditions at the measurement position.

### Published configurations

| Option                                 | Configuration and published parameters                                                                                                                                                        |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Rotating Solid-Sample Holder</b>    | A graduated manual rotation mount for adjusting solid-sample orientation. Angular adjustment: 0–360°; Operation: Manual; graduated scale                                                      |
| <b>Magnetic Stirring Holder</b>        | Stir liquid samples during fluorescence measurements to maintain a mixed solution. Function: Magnetic stirring; Sample format: Liquid samples                                                 |
| <b>Water-Circulated Cuvette Holder</b> | Maintain liquid-sample temperature using an external recirculating water bath. Temperature control: External water circulation; Connections: Water inlet and outlet; bath selected separately |

*Selection: Select the holder around the sample format, optical collection geometry and required circulation connections.*

## Cryostats & Temperature Control

Study temperature-dependent emission with a liquid-nitrogen cryostat.

### Published configurations

| Option                                   | Configuration and published parameters                                                                                                                                                                                       |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>65–500 K Liquid-Nitrogen Cryostat</b> | A liquid-nitrogen system with reduced-pressure operation for temperatures down to 65 K. Temperature range: 65–500 K; Temperature stability: $\pm 0.1$ K; Sample environment: Vacuum / exchange gas; Cooling: Liquid nitrogen |

*Selection: Select the optical windows, sample mounting and temperature range for the experiment.*

For configuration and quotation: [info@precisometer.com](mailto:info@precisometer.com)