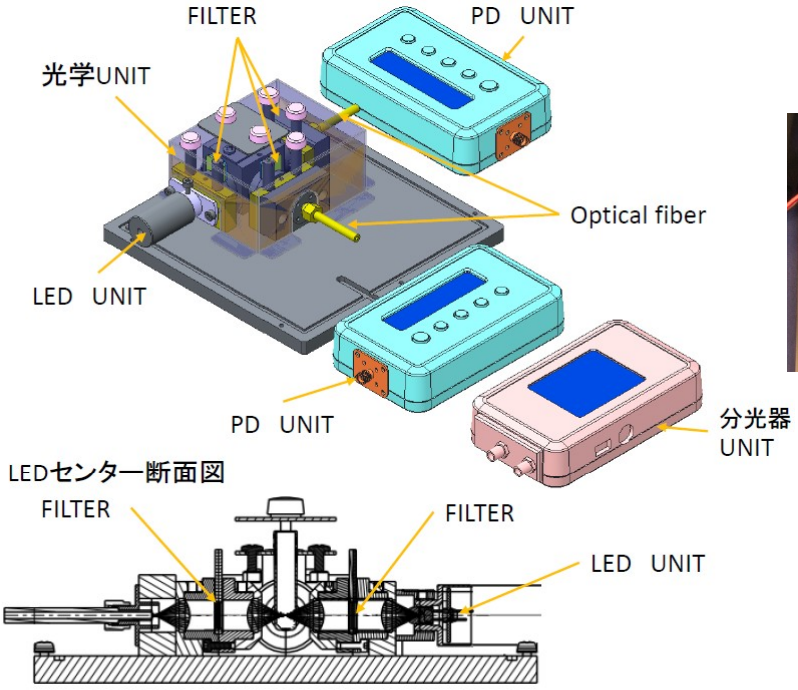
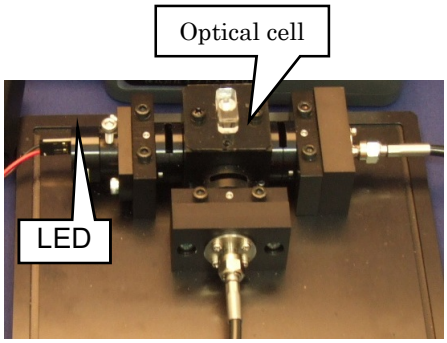
Multipurpose optical engine

M007

Optimal for use optical measurement of a multi-purpose, such as the recovery rate , the fluorescence measurement and emission spectra in the immune diagnosis.





LEDセンター断面図

Overview

Basically, the optical lens system, and an LED light source, detector that is selected according to the purpose of PD and PMT and mini-spectrometers, various optical measurement can be performed.

Characteristic

- Using a multi-wavelength LED to the excitation light source, variable strength to the six levels.
- Excitation, fluorescence detection and optical filter can be selected.
- Design an optical system for the absorption and fluorescence detection as an engine part.
- Detector, can be selected PD · PMT module mini-spectrometer modules for different purposes.

Application

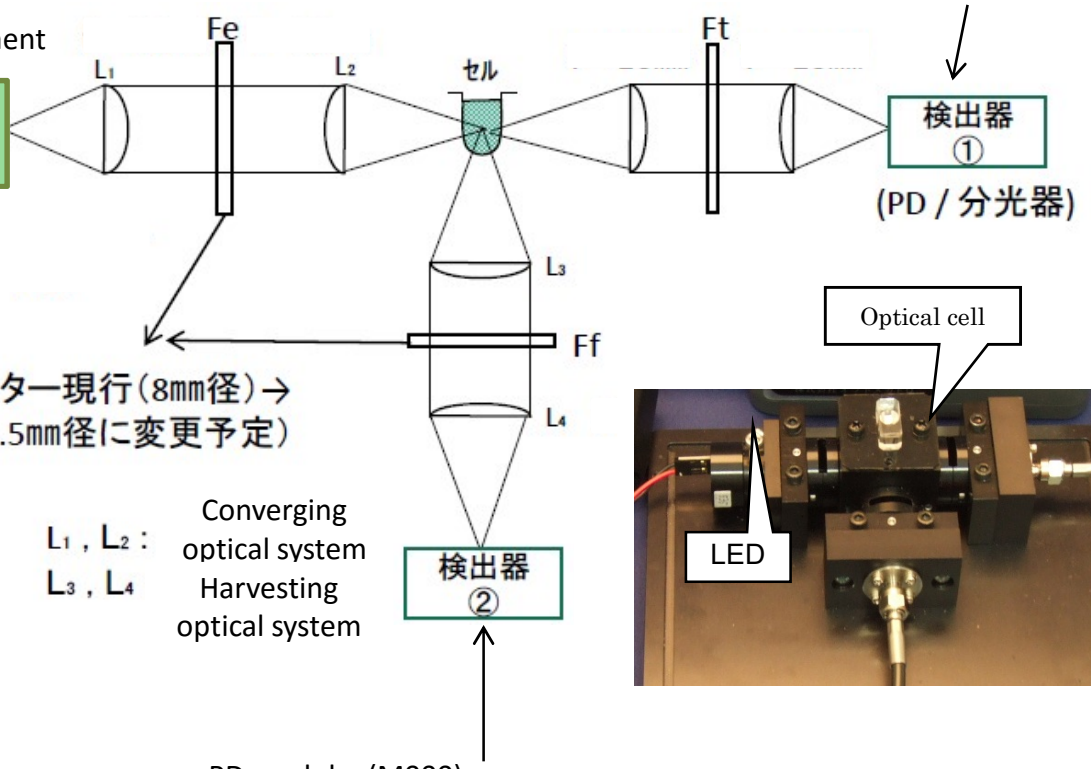
- Spectroscopic analysis and inspection applications of the sample in the bio-medical applications.
- Reflection and transmission (absorption) and the fluorescence of the measurement applications of various materials.

Layout drawing

PD module: (M000)
Absorbance …magnetic particle recovery rate
The spectral module: (M000)
Absorption spectrum distribution … absorption band measurement

LED module for optical experiment

M008

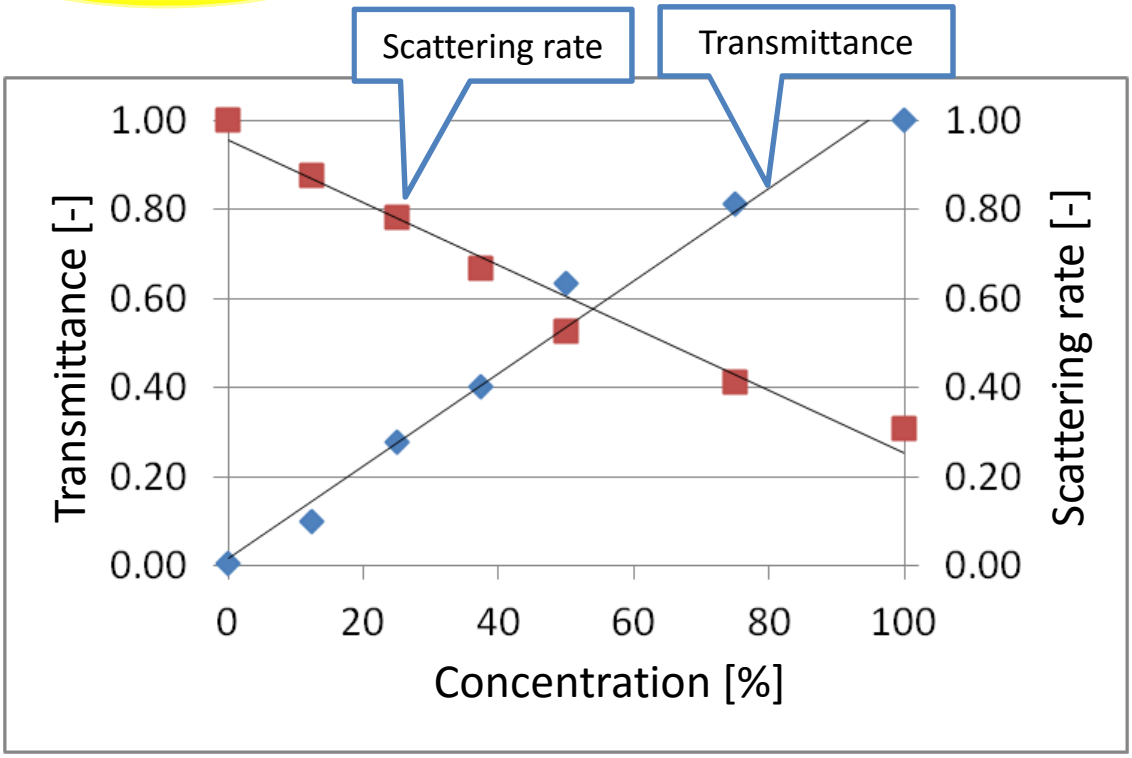


PD module: (M000)
Luminescence, fluorescence, intensity
PMT module: (M000)
Magnetic particle size, the number of measurement
The spectral module: (M000)
Emission, fluorescence spectrum … (energy band measurement)

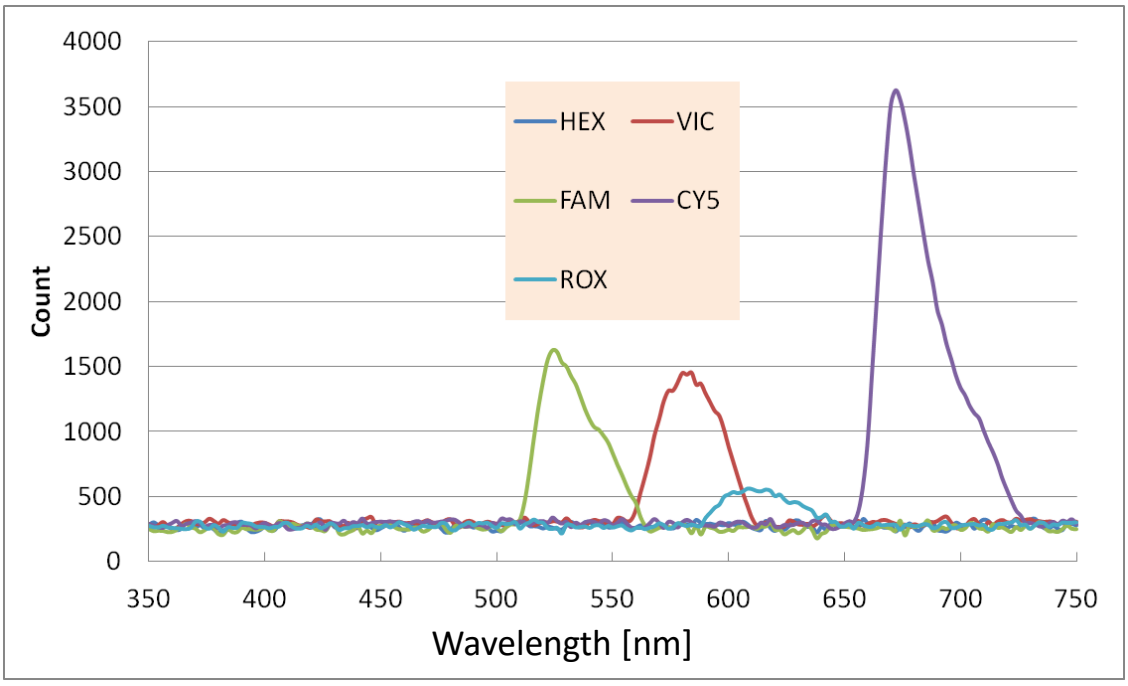
Specification

Item	contents
Wavelength range	600 ～ 1100 [nm]
Mount	Flat field in-plane polychrometer
Grating	Toroidal diffraction grating 20 × 25 (W × T) (effective area 18 × 23)
The number of grooves	480 lines / mm
Near infrared input connector	
Data output connector	
Data options	
Power supply	5 V DC 200 mA(Powered by USB or auxiliary power supply)
Assembly size	65 × 80 × 56
Optical options	Miniature lamp module, optical fiber with SMA (single line, two-branch fiber)

Measurement example



Measurement results of the recovery of the magnetic particles used in chemiluminescent immunization.



Fluorescence measurement data of the PCR reagents

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