# HORIBA

Compact Spectrometer for OCT

OC-300

Spectrometer design that

maximizes OCT measurement performance!

## **OC-300**

### **Compact Spectrometer for OCT**

Contributes to non-contact, high-speed imaging of sample internal structure and complex surface topography



OC-300 is a compact spectroscopy unit for SD-OCT (Spectral Domain Optical coherence Tomography), featuring high resolution, high sensitivity and low polarization dependence, equipped with a transmission-type diffraction grating.

OCT (Optical Coherence Tomography) is an imaging technique that uses light interference to capture images of the internal structure of a sample with high resolution and high speed.

In recent years, it has been used mainly for fundus examination equipment in ophthalmology. In addition, the non-contact, non-invasive, real-time imaging capability makes it applicable in various fields, such as visualization of the internal vascular structure of the skin for cosmetics manufacturers, cell observation for the biotechnology market, and shape measurement of metal working parts.

It can be customized for various wavelength ranges from visible light to near-infrared, depending on each application.

#### High-resolution • High-efficiency

Low polarization dependence

Customizable wavelength range

#### **Application Examples**

- Visualization of blood vessel structure inside the skin
- 3D fundus imaging
- High-speed shape measurement of complex-shaped metalwork
- 3D observation of internal cell structure
- 2D high-speed film thickness measurement

#### **Specifications**

The wavelength range, resolution and detector can be customized to meet your needs.

| Wavelength range              | 790 - 890 nm   |
|-------------------------------|--|
| Spectral resolution           | Less than or equal to 0.1 nm                               |
| Pixel resolution              | 0.05 nm / pixel  |
| Grating                       | Transmission grating                                       |
| Fiber specifications          | Single mode fiber  |
| Dimensions (without detector) | $154 \times 97 \times 54 \text{ mm} [W \times D \times H]$ |

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