

I2R LABS

IDEAS INTO REALITY



Triple-Arm Reflection Probe High-Stability Optical Probe for Multi-Channel Reflectance Measurements

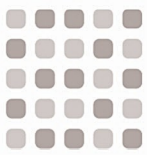


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This precision-engineered triple-arm reflection probe offers an efficient solution for reflectance or fluorescence measurements requiring multiple excitation sources or detection paths. Designed for compatibility with standard SMA905-based spectrometers and light sources, it provides high flexibility, optical performance, and mechanical stability.



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Key Features:

Triple-Arm Configuration :

Three independent optical channels bundled into a single compact probe for synchronized or comparative measurements.

Precision SMA905 Connectors :

Standard SMA905 interface ensures compatibility with a wide range of light sources and spectrometers.

Stainless Steel Protective Sleeve :

Durable outer housing with polished stainless steel tip for optimal reflectance and easy cleaning in lab or field conditions.

High-Quality Fiber Optics :

Optimized core diameter and NA for enhanced signal collection and transmission.

Temperature and Chemical Resistant :

Teflon or metallic outer jacket options offer resistance against harsh environments.

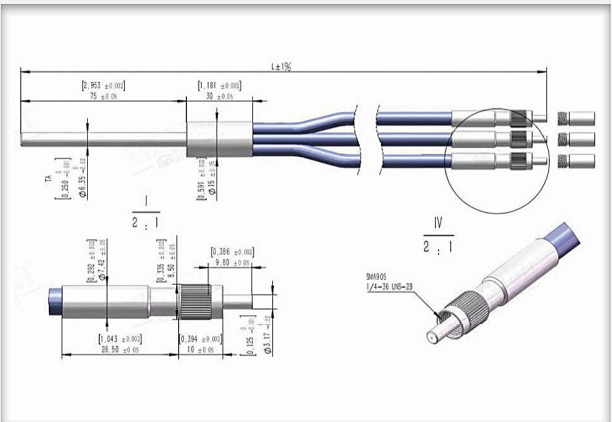
Applications:

- Reflectance and fluorescence spectroscopy
- Color and coating analysis
- Chemical and biological sensing
- Industrial quality control
- In-situ monitoring

Technical Specifications

Parameter Value / Description

- Fiber Configuration 3 fiber arms converging into one tip
- Connector Type SMA36-¼ ,905 UNS-2B
- Sleeve Material Stainless Steel
- Fiber Core Diameter 600 µm (standard, customizable)
- Numerical Aperture (NA) 0.22
- Tip Diameter ~6.5 mm
- Sleeve Length 75 mm + 30 mm (as per drawing)
- Branch Length Tolerance ±%1
- Operating Wavelength Range 1100 – 200 nm
- Jacket Color Blue (customizable on request)



Customization Options

- Varying core diameters (e.g., 200 µm, 400 µm, 600 µm)
- Probe angle or tip geometry
- Reflective or transmissive tip designs
- Bundle configuration for NIR or UV-VIS applications

