

TOP 300 AR/VR Optical Probe

For Radiance and Luminance Measurements

Key features at a glance

- ▲ Robust, compact and lightweight design for manufacturing applications
- ▲ Integrated viewfinder camera with 5 MP
- ▲ Optics mimic the human eye with a FOV of $\pm 1.2^\circ$
- ▲ Configurable entrance pupil and focus distance
- ▲ Binocular setup possible
- ▲ Fiber guide with integrated mode-mixing adapter



The TOP 300 AR/VR optical probe from Instrument Systems is designed for high-accuracy luminance and color measurement, enabling precise determination of luminance and spectral radiance. It provides detailed color analysis of light sources, optical lenses, optical modules, and fully assembled AR/VR (Augmented Reality/Virtual Reality) devices. This advanced instrument guarantees exceptional accuracy in characterizing near-eye displays and other optical components used in AR/VR applications.

\\ TECHNICAL SPECIFICATIONS

TOP 300	
Optical properties	
Entrance pupil diameter (Others upon request)	2.5 mm / 3.0 mm / 3.6 mm / 4.5 mm (One entrance pupil can be configured)
Focus distance (Others upon request)	1000 mm / 1333 mm / 1500 mm (One focus distance can be configured)
Optical probe Field of View	$\pm 1.2^\circ$
View finder Field of View	$\pm 3.5^\circ$
Fiber length	Approx. 3 m
Bending radius fiber	200 mm
View finder resolution (H x W)	2592 px x 1944 px
Nominal resolution	5 MP
Type view finder	Mono



▲ TOP 300 features a viewfinder camera and pairs best with a high-end CAS spectroradiometer.

TECHNICAL SPECIFICATIONS

Environmental properties	
Operation temperature	+15 °C to +35 °C
Mechanical properties	
Dimensions (D x H x W)	255 mm x 80 mm x 40 mm
Weight	Optical probe without fiber: 690 g Optical probe with fiber: 1350 g
Mounting	4 x M3 thread (depth 9 mm) (60 mm x 20 mm pattern) 2 x dia. 3 H7 (depth 6 mm)
Electrical properties	
Power consumption	Via USB (1.4 W)
Connector type	USB 3.0 A
Protection class	Class III
Cable length	Approx. 1.1 m
Interface	
Interface protocol	USB vision

Instrument Systems is continually working to develop and improve products. Technical changes, errors or misprints do not constitute grounds for compensation. The company's terms of delivery and payment apply in all other respects.

ORDERING INFORMATION

Order number	[Focus distance]	[Entrance pupil diameter]
TOP300-[Focus distance][Entrance pupil diameter]	01: 1000 mm 02: 1333 mm 03: 1500 mm	A: 2.5 mm B: 3.0 mm C: 3.6 mm D: 4.5 mm
Configuration number example (focus distance 1000 mm; entrance pupil diameter 4.5 mm): TOP300-01D		

VIDEO



Scan to watch the video:
 "Characterizing near-eye displays in AR/VR
 headsets with Top 300 and CAS 140D".