



uku / uls

The flexible integrating spheres series

uku series integrating spheres enable the fast and easy setup for measurements of the radiant power and the luminous flux of light sources as well as the reflection or transmission of materials. The uls series models are used as homogeneous light source – controlled or with a fixed light source. The idea of the uku series is simple, exact and flexible. The uku series concept is based on planar surfaces allowing to exactly adjust any type of detector, light source and material sample easily and without port adapters in a highly flexible way to the sphere ports. The overall surface of the ports in the standard configuration clearly lies under 1% of the overall sphere surface and therefore complies with the DIN 5036 standard by far.

The integrating spheres of the uku series with a diameter of up to 240 mm are table top devices. Larger models are supported by a solid frame. All models are made of high-quality and compact aluminum. A well-assorted selection of accessories enables the highly flexible use of the various integrating sphere models.

Fast setups generating reliable measurement results, these are the strengths of the uku series.

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Specifications

Sphere material	Aluminum
Internal coating	BaSO ₄ , further coatings on request
Reflection factor	> 0,93 %
Port fraction (standard configuration)	f < 1% of the overall surface
Sphere factor (depending on model)	M about 8,6 – 12,2

uku models

uku120, uku240, uku315, uku500, uku800, uku1000, uku1600

Accessoires

• FSMA port lock cover plate with fiber connection	• Port lock cover plate against dust and light
• Auxiliary light source	• Calibrated auxiliary light source
• frc'3 photometer	• spr'3 spectroradiometer
• spec'3 spectrometer	• luca'lux luminance measurement system
• Fixing claw frc'3	• Fixing claw spr'3
• Fixing claw f	• Sample platform for the positioning of samples
• Temperature and humidity sensor	• Optical bench outside the integrating sphere
• Power measuring device	• High-quality, programmable laboratory power supply

Applications

Measurement of the total luminous flux (4pi and 2pi)
Measurement of the integral spectral distribution and the color values
Measurement of the specular and diffuse reflection and transmission
Measurement of the luminous flux efficiency in lm/W (power efficiency ratio)
Measurement of the luminaire light output ratio in %