

UPG-150-ART

<https://www.gigahertz-optik.com/es-es/producto/upg-150-art/>

Etiquetas del producto:



Descripción

UPG-150-ART - multi-functional integrating sphere for reflection, transmission and radiant power in the infra-red spectral range

Photometry to determine key material properties

Key material properties is a general term used to refer to the reflection, transmission and absorption properties of a material. Photometry hereby refers to a measurement process through which these properties are determined using a photometer.

Integrating sphere photometer

The integrating sphere is very important in both broadband and narrow-band photometric applications for diffuse sample illumination and detection of the reflected and transmitted light proportions.

Gold coating

Gold has a high, constant spectral reflectance within the spectral range between 800nm and 20µm. Integrating spheres with gold coatings are therefore ideally used for applications in the infrared spectral range. Gigahertz-Optik exclusively uses pure gold characterized by a 95% reflectance to coat its integrating spheres for IR applications. The roughness of the inner sphere surface is designed for optimum diffuse reflectance.

UPG-150-ART precision integrating sphere

With the 150mm diameter, the UPG-150-ART provides a good compromise in terms of precision of the sphere function and level of the measurement signal. Its production from a solid aluminum block ensures a very precise alignment of the measurement ports to each other. Another characteristic property are the thin circumferential knife-edges of the measurement ports that enable a high acceptance angle for diffuse light.

Multifunctional integrating sphere

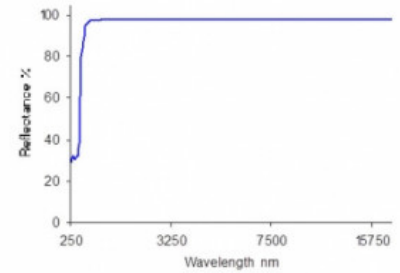
The UPG-150-ART is ideal for multiple functions through its five knife-edged measurement ports that can be used either while open or closed. Possible measurement setups include:

- 0°/d Reflection
- 8°/d Reflection with or without gloss
- 0°/d directed and diffuse transmission
- Measurement with sample absorption correction
- Two-ray measurement setups
- Radiant power measurements

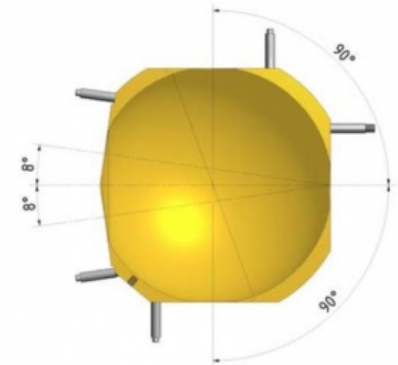
Accessories for individual sphere assemblies



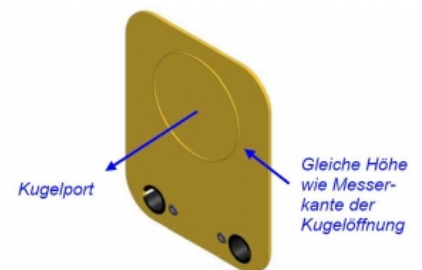
universal integrating sphere



Typical spectral reflectance of the pure gold sphere coating



Alignment of the five measurement ports of the UPG-150-ART enables universal use of the sphere.



Port plugs and port reducers that can easily be fixed and removed using the Slide & Fix holder are offered for either closure or reduction of ports. An important feature of the UPB-150-ART is that the front side of the plugs and reducers projects into the port and is on the same level as the sphere surface.

Universal sample holder

The sample holder is slid and fixed onto the posts of the Slide & Fix holder and ensures secure mounting of thin and thick samples. An important feature of the Slide & Fix system is that it can be combined with port reducers and a light trap.

Light trap with Slide & Fix holder

The light trap has a 30mm input port and ensures minimal back reflection over the entire usable spectral range of the integrating sphere through its internal design and black absorbing coating. The Slide & Fix holder can be used to combine the light trap with port reducers and the sample holder.

Quick-change holder for detectors and light guides

Removable adapters are offered for mounting of detectors and light guides. Each has a baffle that can be aligned to the five measurement ports accordingly depending on the measurement application. The UMPA port adapters of our modular integrating spheres can hereby be used.

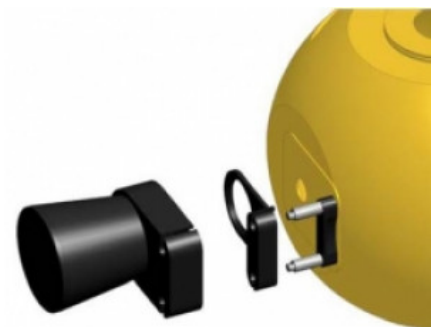
Gold coating also available as a service

We offer gold coatings for integrating spheres or other parts also as a service. Please contact us with your specific request.

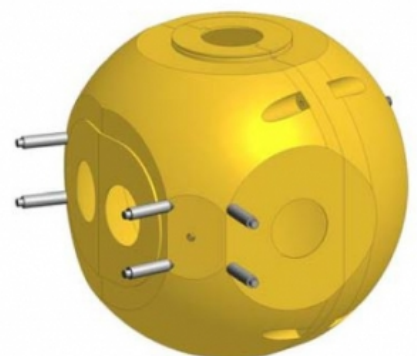
The front side of the port plugs and port reducers and sphere surface are at the same level and thus ensure an almost ideal reflection surface



UPG-150-ART multi-port integrating sphere with Slide & Fix system for mounting of accessories.



Light trap for absorption of the transmitted light proportion of transparent samples in 8°/d reflectance measurement setup. Additional port reducer.





UPG-150-ART-Z01, port plug



UPG-150-ART-Z02-3, 3mm port reducer



UPG-150-ART-Z02-15, 15mm port reducer



UPG-150-ART-Z02-25, 25mm port reducer



UPG-150-ART-Z03, sample holder



UPG-150-ART-Z04, light trap



UPG-150-ART-Z05, 0.5" detector adapter with baffle



UPG-150-ART-Z06, 1.0" detector adapter with baffle



UPG-150-ART-Z07, 2.0" detector adapter with baffle

Especificaciones

General

Breve descripción Five port integrating sphere for universal use in transmission and reflection measurement application in the infrared spectrum.

Características principales Coating with pure Gold for highest possible reflection within the IR spectrum. Machined out of solid material. Therefore very precise spherical shape, position of the application ports and finish of the knife edges of the application ports. Accessory for the application ports with Slide&Fix mounting System. Detector port with baffle.

Rango de medición Diameter: 150 mm (6 inch)
Coating: pure gold, 95 % reflectance (850 nm to 20 μ m)
Application ports: five, 30 mm diameter with knife edge, post for Slide&Fix accessory
Detectorport: exchange able Adapters with baffle

aplicaciones típicas IR spectrophotometer. Other IR transmission and reflection measurement set-ups.

Calibración -

Producto

Diámetro de la esfera 150 mm

Recubrimiento ODG95 pure gold

Diámetro del puerto de medición 30 mm

Espesor del borde de la cuchilla 0.5 mm (knife edge design)

Número de puertos de medición Five

Tolerancia de ángulo de la configuración del puerto $\pm 0.1^\circ$

Accesorios Every two removable posts of the Slide & Fix System

Apertura 30 mm with a circumferential frame ($\varnothing = 58$ mm) with a lateral V-notch

Montaje Flat base with four M5 threaded holes within a 50 mm pitch circle

Miscelánea

Peso	Approx. 1.6 kg
Dimensiones	see download section
Opciones	
UPG-150-ART-Z01	Port plug. Sphere surface coated with ODG95.
UPG-150-ART-Z02	Port reducer. Aperture diameter specified by customer set in 0.1 mm steps. Sphere surface coated with ODG95.
UPG-150-ART-Z02-3	Port reducer. 3 mm aperture. Sphere surface coated with ODG95.
UPG-150-ART-Z02-15	Port reducer. 15 mm aperture. Sphere surface coated with ODG95.
UPG-150-ART-Z02-25	Port reducer. 25 mm aperture. Sphere surface coated with ODG95.
UPG-150-ART-Z03	Sample holder
UPG-150-ART-Z04	Light trap
UPG-150-ART-Z05	UMPF-0.5 Detector adapter with Baffle. Sphere surface and baffle coated with ODG95.
UPG-150-ART-Z06	UMPF-1.0 Detector adapter with Baffle. Sphere surface and baffle coated with ODG95.
UPG-150-ART-Z07	UMPF-2.0 Detector adapter with Baffle. Sphere surface and baffle coated with ODG95.

Descargas

Tipo	Descripción	Tipo de archivo	Descargar
Datasheet	Dimensions UPG-150-ART		
Datasheet	Dimensions UPG-150-ART-Z01		
Datasheet	Dimensions UPG-150-ART-Z02		
Datasheet	Dimensions UPG-150-ART-Z02-3		
Datasheet	Dimensions UPG-150-ART-Z02-15		
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Datasheet	Dimensions UPG-150-ART-Z03		
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Datasheet	Dimensions UPG-150-ART-Z06		
Datasheet	Dimensions UPG-150-ART-Z07		

Información de compra

Número de artículo	Modelo	Descripción
Producto		

Número de artículo	Modelo	Descripción
15297574	UPG-150-ART	Integrating sphere
Accesorios		
15297575	UPG-150-ART-Z01	Port plug
15297576	UPG-150-ART-Z02	Port reducer. xx aperture diameter set in 0.1mm steps. xx =
15297628	UPG-150-ART-Z02-3	Port reducer 3mm
15297629	UPG-150-ART-Z02-15	Port reducer 15mm
15297630	UPG-150-ART-Z02-25	Port reducer 25mm
15297577	UPG-150-ART-Z03	Sample holder
15297578	UPG-150-ART-Z04	Light trap
15297579	UPG-150-ART-Z05	UMPF-0.5 Detector adapter
15297580	UPG-150-ART-Z06	UMPF-1.0 Detector adapter
15297581	UPG-150-ART-Z07	UMPF-2.0 Detector adapter

Contacto, calibración, servicio y asistencia

Somos conocidos en todo el mundo por nuestro excelente asesoramiento técnico y asistencia posventa. Póngase en contacto con nosotros para encontrar juntos la mejor solución para usted. Nuestros servicios:

- Asesoramiento técnico y ventas
- Soporte postventa
- Calibraciones y recalibraciones (servicios de calibración ISO/IEC 17025, calibración en fábrica, calibración de productos de terceros)
- Reparaciones y actualizaciones
- Consultoría OEM y de viabilidad de soluciones personalizadas

[Envíenos su consulta](#) o póngase en contacto con nosotros por teléfono o correo electrónico. También nos gustaría recibir sus comentarios o reseñas en [Google](#).

Gigahertz Optik GmbH (Sede central)

Tel.: +49 (0)8193-93700-0
Fax: +49 (0)8193-93700-50
info@gigahertz-optik.de

An der Kaelberweide 12
82299 Tuerkenfeld, Germany

Gigahertz-Optik, Inc. (Oficina de EE.UU.)

Phone: +1-978-462-1818
info-us@gigahertz-optik.com

Boston North Technology Park
Bldg B - Ste 205
Amesbury, MA 01913 USA