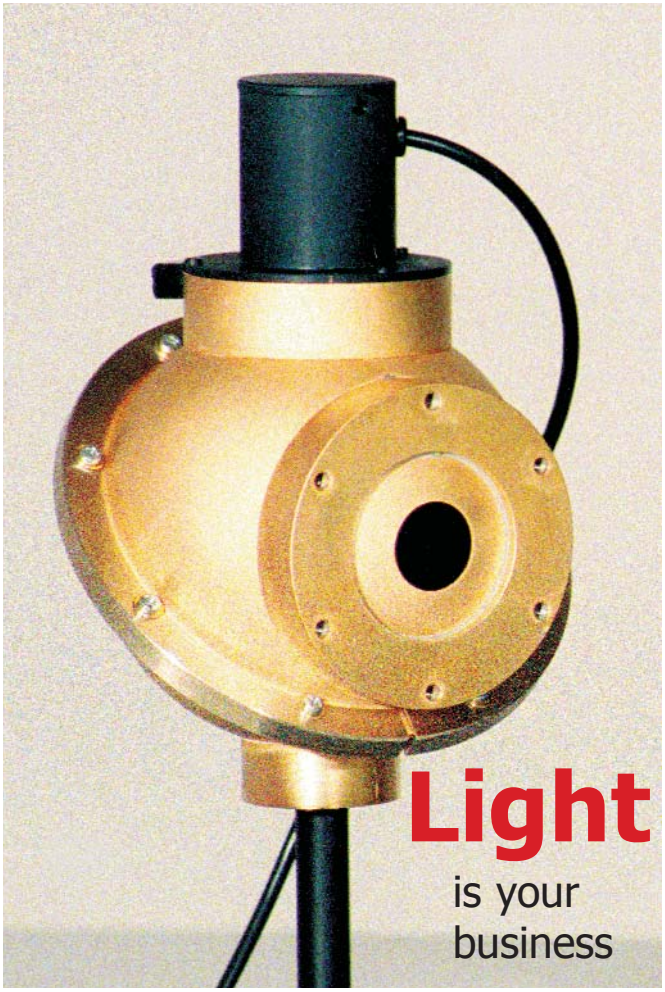
INTEGRATING SPHERES

coated with

OPTOGOLD



What is an INTEGRATING SPHERE

Integrating spheres are an obligatory tool for a lot of optical techniques, where a high and diffuse reflection is required.
Applications, in general terms, are as:

- **Collector for optical rays**
- **Extreme homogenous lightsource**

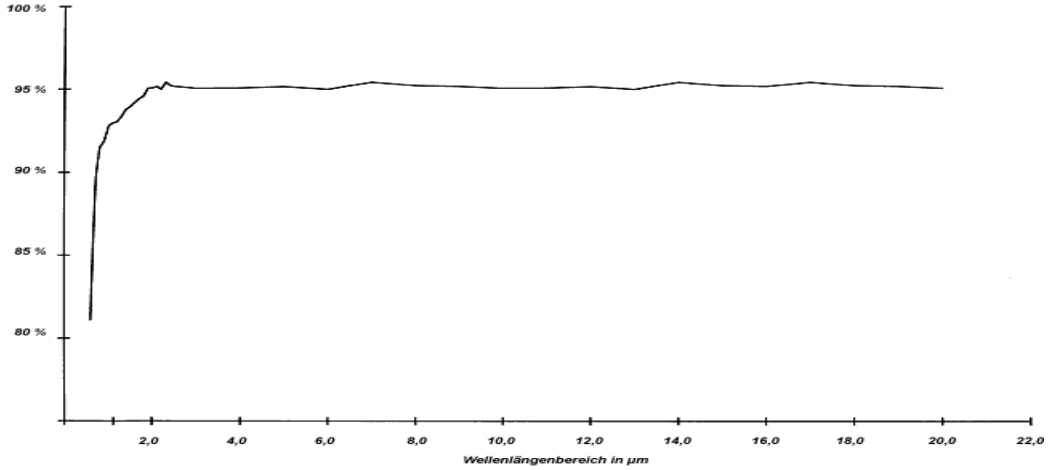
Applications

- **Radiant Power / Luminous Flux**
- **Transmission / Reflection**
- **Absorption / Straylight**
- **Spectral / Integral Measurement**
- **Radiance / Luminance Standard**
- **Homogenous Lightsource**

WHY using an Integrating Sphere, coated with OPTOGOLD

For applications in the wavelength range from 700nm up to 20µm, we offer coating of our Integrating Spheres with OPTOGOLD. This type of coating has a diffuse reflecting, gold plated surface and offers ideal properties as a Lambertian reflector.
The aforementioned features are perfect reasons to use OPTOGOLD in the MIR- to FIR-wavelength range.

- **Reflectivity between 1 - 16µm:** **93 - 95%**
- **useful wavelength range:** **700nm - 20µm**



Accessories

For various measuring applications, we offer parts as e.g. bushes for optical fibres (e.g. SMA-, FC-, ST- etc). For LED measurement, different fittings are available, as well as accessories like openings adapter, light traps, laser targets, sample holders, closing blinds, opening windows, photometer-/ radiometer adapters, filter-fittings and filter-wheels.
We also offer delivery of a complete Integrating Sphere according to your specifications, including lamps and a main connector, custom-made upon your demands.

Our Standard Spheres coated with OPTOGOLD from 700nm up to 20µm

Part-No.	Diameter of Sphere
OPS25-X	25 mm
OPS50-X	50 mm
OPS80-X	80 mm
OPS100-X	100 mm
OPS150-X	150 mm
OPS200-X	200 mm
OPS250-X	250 mm
OPS500-X	500 mm

Further diameters are deliverable upon request.

Coating services

Offering Integrating Spheres with diameters of up to 3 meters, we are in a position to offer them either with Barium Sulfate $BaSO_4$, or with ZENITHPOLYMER coating. Of course, we also offer this service for any other geometric forms. We are looking forward to discuss your application's requirements with you.

Our standard Spheres

Standard spheres have one detector and one opening port. Optionally, each sphere can be equipped with additional ports, these being placed according to your needs. Between the detector and the opening port, a shutter is mounted to eliminate direct reflection. Apertures and adapters are optionally available, following the requirements of your application.

Integrating Sphere, made out of ZENITHPOLYMER, for the wavelength range between 250nm up to 2.500nm

Homogeneous light source

For calibration and tests of cameras, detectors, CCD sensors and others, Integrating Spheres are used as an extreme homogeneous light source.
Its construction guarantees a homogeneous and stable optical radiance, which is of utmost importance for this kind of applications. We offer a complete system including all required lamps and power supply. Calibration of the system can be carried out by an independent institut and in different optical measuring units.

Further datasheets of our product range available:

- **ZENITHPOLYMER material**
- **ZENITHPOLYMER foils**
- **ZENITHPOLYMER integrating spheres**
- **ZENITHPOLYMER projection walls**
- **Homogeneous Light Source**
- **Gold-coated products**

In case you need more information or have any questions about our products and services, please send us your specifications or contact us by phone. FAX or e-mail.

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