

ARCOPTIX ARCSPPHERE-MIR



The ARCOptix ARCSPPHERE-MIR is an integrating sphere featuring an internal SiC globar for diffuse reflection measurements in the MIR. Light emitted by the source is prevented from illuminating the sample directly by the presence of a deflector (baffle). The highly reflective gold coated sphere has a diameter of 50mm and a sample port of 10mm with a BaF₂ window. The output of the sphere is directly injected in one of our FTIR, such as the **FTMIR-L1-120-4TE**, maximizing throughput. The internal volume of the sphere is cleaned by a desiccant capsule allowing to reduce significantly the contribution from water vapor and CO₂ on the measurement.

Specifications

| Product code | ARCSPPHERE-MIR |
|----------------------------------|------------------|
| Sphere internal diameter [mm] | 50 |
| Sample port diameter [mm] | 10 |
| Sample port window material | BaF ₂ |
| Output port diameter [mm] | 12.7 |
| Light emitting element | SiC globar |
| Source temperature [K] | ~1'550 |
| Rated life-time [hours] | 10'000 |
| Power consumption (7-12 VDC) [W] | 30 |
| External dimensions [mm] | 93x93x130 |
| Weight [g] | 1300 |

SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT NOTICE
Please contact info@arcoptix.com for more information.

FIBERED REFLECTION PROBES



Fibered reflection probes are common accessories to measure specular or diffuse reflection in FT-IR systems. They are especially well suited for applications requiring a lot of flexibility. We offer fibered probes of three different kinds, depending on the fiber constituting glass, each targeting a specific spectral range. Light is brought to the sample via a peripheral fiber bundle which helps in achieving homogeneous illumination, and is collected by single, central fiber.

Specifications

| Product code | R7-NIR-600-200F | R2-IFG-500-150F | R7-PIR-900-150F |
|-----------------------------------|---|--|--|
| Spectral range [μm] | 0.4-2.5 | 2-5.5 | 4-16 |
| Spectra range [cm ⁻¹] | 4'000-25'000 | 1'800-5'000 | 650-2'500 |
| Illuminating fiber bundle | 6x low-OH, 600 μm core diameter silica fibers | 2x 500 μm core diameter IFG fibers | 7x 400 μm core diameter PIR fibers |
| Reading fiber | low-OH, 600 μm core diameter silica fiber | 500 μm core diameter IFG fiber | 900 μm core diameter PIR fiber |
| Probe ferrule | Stainless steel ferrule ø1/8" (3.175mm x 74mm) | Stainless steel ferrule ø1/4" (6.35mm x 74mm) | Stainless steel ferrule ø1/4" (6.35mm x 74mm) |
| Length [m] | 2 | 1.5 | |
| Fiber connectors | SMA905 | | |
| Recommended Instrument | FTNIR-L1-025-2TE | FTMIR-L1-060-4TE | FTMIR-L1-160-LN2 |

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