



## Description

- Rotating diffusers are used to integrate a changing speckle or interference pattern over time. The rotating diffuser system allows easily change between different diffuser plates. The rotating diffuser system is for sole use in indoor laboratory installations.
- 2D random diffuser (different divergence angles on request)
- For multi shot and cw applications
- Plug and Play solution
- Power supply with dual output, possibility to plug in the laser source
- Rotation speed easily adjustable over voltage

## Specification

### Mounting plate, diffuser plate and protective box

Linios mounting plate (Outer dimensions 40X40 mm)

Rotating diffuser plate (Outer  $\varnothing$  25mm – Inner  $\varnothing$  3,2mm)

Holes for holding the mounting plate with rods ( $\varnothing$  6mm)

Holes for laser beam passing through the diffuser plate ( $\varnothing$  6mm)

Tilt of rotation axis 5°

Aluminium protective box with black anodized aluminium

### Power supply

Type "Alimdiffus2"

Protection class II

#### Input:

Universal input range AC 100-240V / 0.15-0.08A / 50-60Hz

Input protection with internal fuse

Power cord with plug C7

#### Output:

- Out1: Fixed 6VDC / 1A

- Out2: adjustable 1,25 – 4,3 VDC / 0,1A

Output-connectors from Binder, Snap-in series 719, 4 contacts

## EMC & Safety

Emission Standards:

Emission of radio disturbances (Radiation)	CISPR 11 (2009)
Emission of interference voltages (Conducted)	CISPR 11 (2009)

Immunity Standards:

Electrostatic discharge immunity (ESD)	EN 61000-4-2 (2001)
Radio-frequency electromagnetic fields	EN 61000-4-3 (2001)
Conducted disturbance inducted by RF	EN 61000-4-6 (2007)
Electrical fast transient/burst immunity	EN 61000-4-4 (2004)
Surge immunity	EN 61000-4-5 (2001)
Voltage dips on power-lines	EN 61000-4-11 (2004)
Voltage interrupts power-lines	EN 61000-4-11 (2004)

Safety Standard:

EN 61010-1 (2001)  
Safety requirement for laboratory use  
Output: Safety Extra Low Voltage SELV

## Environmental

Operating Temperature	5°C to 35°C
Operating Humidity	30-75% RH
Geographical height	up to 2000m
Degree of protection	IP20

## General

Warning:



Local regulation regarding Laser safety must be applied. The equipment shall not be put into service until all applicable local safety requirements are complied with by the overall host system the rotating diffuser is integrated into.

The Rotating Diffuser and its power supply are not intended as a stand-alone unit but are to be integrated into an overall host system.

- The Rotating Diffuser must be installed by a qualified person.
- The plug of the appliance cord set serves as disconnection device and shall remain accessible after installation into the host system.
- The equipment may be integrated into an Emergency Off system by switching off the supplying socket outlet to the power supply.

- Maximum sound power level: below 70dB(A).
- If damaged, the equipment shall be disconnected from the voltage supply and send back to the manufacturer for repair. Opening of the Rotating Diffuser, modifications of the power supply or changing of parts without authorization of SUSS MicroOptics SA will invalidate warranty or liability of SUSS MicroOptics SA.
- After its useful lifetime, the equipment may be discarded as industrial waste or send back to the manufacturer for disposal. In general, the equipment meets the material restriction specification of the RoHS directive.

### **Warranty**

See "Terms and Conditions" on [www.suss-microoptics.com](http://www.suss-microoptics.com). Our terms and conditions are valid.

The customer loses all claims of warranty if any modifications or repairs have been carried out by people not specifically appointed by SUSS MicroOptics.