SCHOTT
glass made of ideas

VisiLED Series

Professional illumination
for stereo microscopy

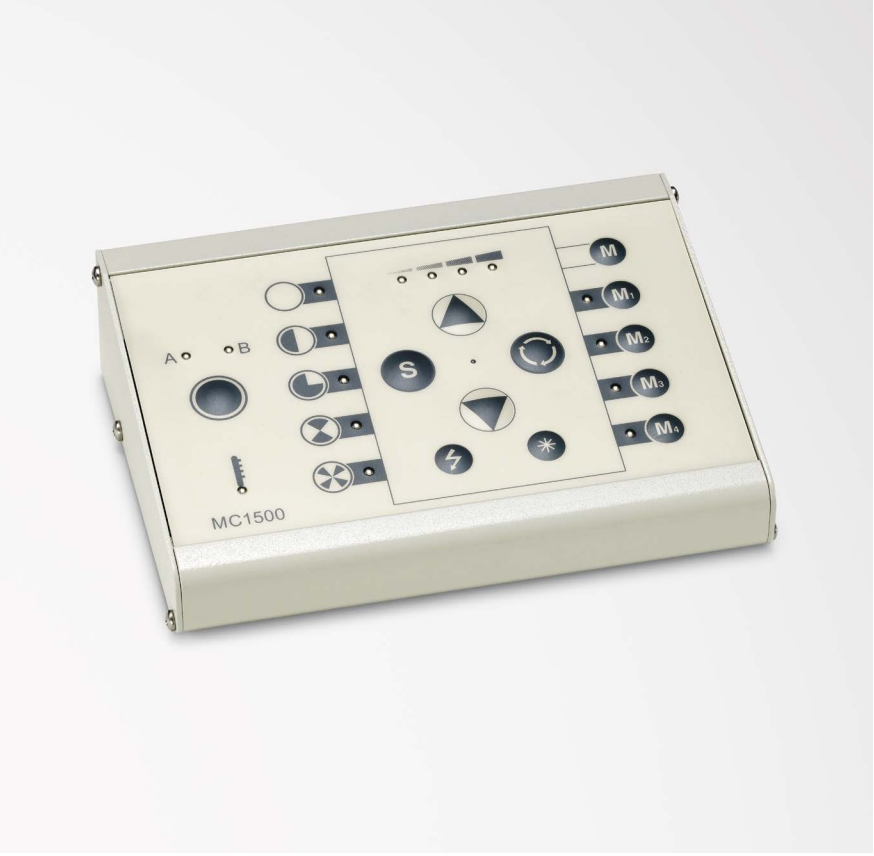
SCHOTT is a leading international technology group in the areas of specialty glass and glass-ceramics. With more than 130 years of outstanding development, materials and technology expertise we offer a broad portfolio of high-quality products and intelligent solutions that contribute to our customers' success.

Light is a key element in stereo microscopy. Reliable illumination solutions are necessary to make hidden details visible and results reproducible. SCHOTT's Lighting and Imaging division offers a complete portfolio in fiber optic and direct LED illumination to provide the most suitable contrasting solution for a variety of industrial applications and life science.

Contents

Discover our VisiLED Series

The SCHOTT VisiLED series is a range of advanced modular LED illumination products specially designed for stereo microscopy. Active control of the LED temperature, the option to select different controllers, and a large number of accessories enable bespoke lighting systems for your application.



Smart control
A broad range of control options allows you to select exactly the right product for basic tasks, as well as complex systems with two computer-controlled light heads. Controllable options include light intensity, segment modes and change of illumination direction.

Flexible options for strong contrast
The SCHOTT VisiLED product line offers powerful light heads for tasks up to the highest magnification. In addition, darkfield options and control of individual segments enable a number of contrasting methods to make the invisible visible.

Benefits

Powerful luminance

Intense light output for specialized tasks.

Intelligent light heads

Actively controlled LED temperature.

Maintenance-free

LED lifetime of 50,000 hours.

Advanced control options

VisiLED Controllers enables a wide variety of illumination options.

Product Variants

There are a number of different products in the SCHOTT VisiLED series for stereo microscopy, including ring lights and back lights, as well as a range of accessories and controllers. Taken together, they form a highly controllable illumination system that offers a powerful, flexible and universal lighting solution.

Ring Lights

VisiLED Ring Lights are available in brightfield, darkfield and UV versions. All offer extremely homogeneous and shadow-free illumination in a robust metal housing, with a well-designed heat sink enabling maximum brightness and a long lifetime. In combination with accessories such as diffusers, polarizer sets and adaptor rings, different illumination modes are possible.

Characteristics

- Slim ergonomic design
- Specially selected LEDs
- Five segment modes possible: full circle, semi-circle, quarter-circle, dual-segment and four-segment
- Maintenance-free with an lifetime of 50,000 hours for white LEDs
- Actively controlled LED temperature
- Darkfield Ring Light adaptable to various objective diameters and working distances

Advantages

- Extra-fine dimming
- Unique Slim Ring Light adjustable for various working distances and darkfield
- Dedicated versions compatible with objective revolvers
- UV Ring Light allows electronic switching between bright field and UV

See SCHOTT's segmented ring lights in action and learn about typical areas of application.

Back Lights

VisiLED Back Lights offer homogenous and shadow-free illumination, with a light intensity up to 20,000 cd/m². The slim design, tough metal housing and well-designed heat sink enable worry-free handling, with the VisiLED Darkfield Back Light TLS-DF version offering the possibility of transmitted darkfield illumination.

Characteristics
- Slim ergonomic design
- Specially selected LEDs
- Five segment modes possible: full circle, semi-circle, quarter-circle, -dual-segment and four-segment
- Actively controlled LED temperature
- Maintenance-free with an LED lifetime of 50,000 hours

Advantages
- Compatible with different OEM designs
- Glass surface for scratch resistance
- Made with SCHOTT Opalika® for perfect homogeneity

Controller

The VisiLED Controllers MC 1100 and MC 1500 are the core of the VisiLED system. The compact MC 1100 allows the setting of various illumination parameters, including light intensity, segment modes and change of illumination direction, while the MC 1500 offers this for two light heads simultaneously.

Characteristics

- Preset segment modes plus rotation option
- Extra-fine smooth dimming
- MC 1500 offers an external trigger to start strobe function frequencies between 15 Hz – 5 kHz
- MC 1500 offers optional PC control via RS 232 & footswitch control

Advantages

- Advanced setting options for optimum contrast
- Ergonomics and blindfold operation
- MC 1500 model offers control of two channels
- Save up to four complex illumination scenarios with MC 1500

Accessoires

The range of accessories in the VisiLED series provides even more options for contrast enhancement in all applications. SCHOTT ensures that all its accessories offer simple-to-use operation and a long lifetime, with the segmented polarizer set offering the ability to switch between polarized and non-polarized light without mechanical movement. All SCHOTT accessories use carefully selected materials to deliver best-in-class performance.

Characteristics

- Polarization filter with extinction ratio of 9,000:1
- Diffuser with perfect haze of more than 99 % and high transmission
- Segmented polarization

Advantages

- The unique tubular diffuser combines in an economic way the advantages of dome lights and conventional diffusers and enables perfect contrast for highly reflective objects
- No mechanical movement with segmented polarizer set
- Smooth motion of polarizer against analyzer

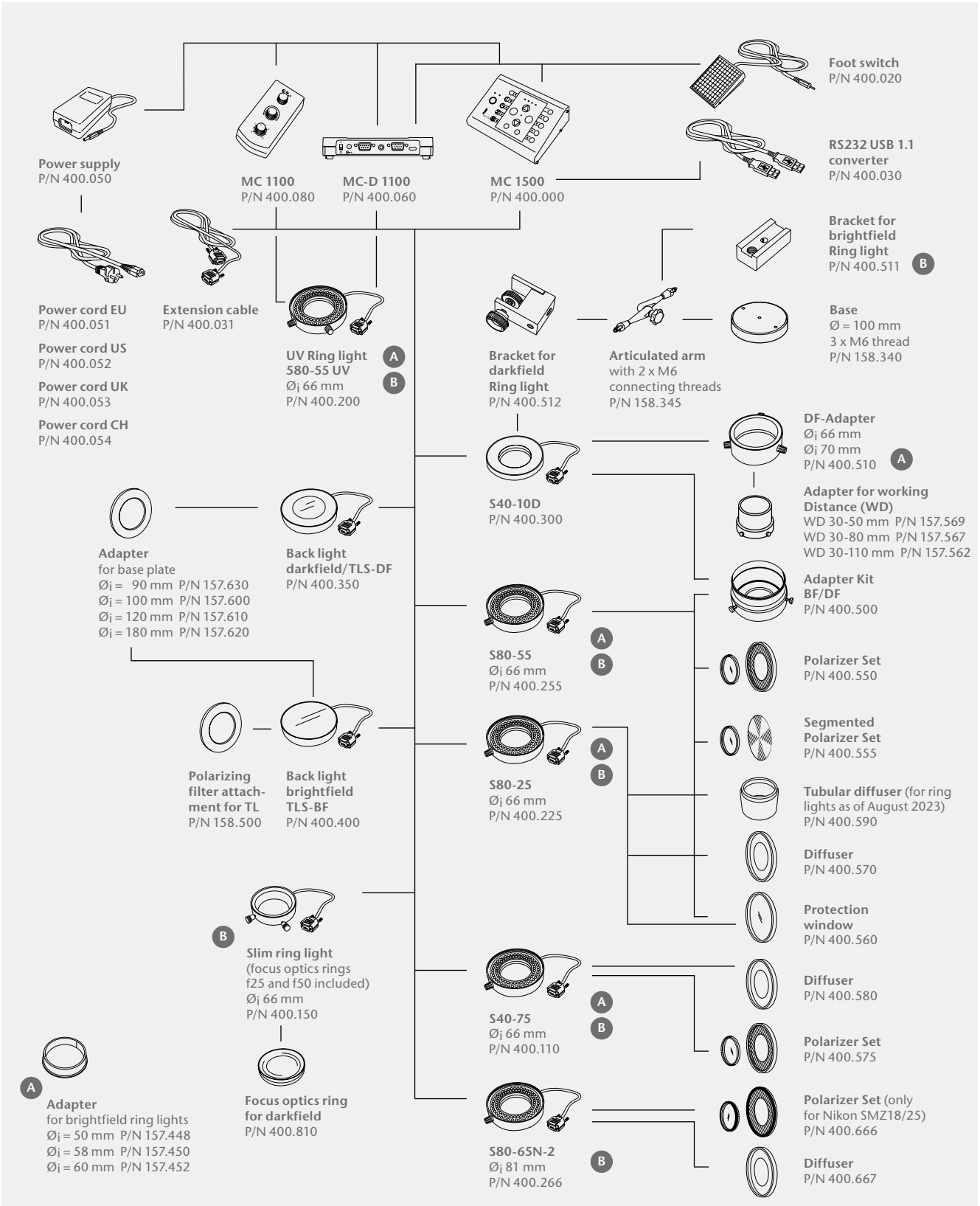
Watch the video about SCHOTT's tubular diffuser.

See SCHOTT's segmented polarizer set in action and learn about typical areas of application.

Observation Methods

VisiLED Series									
		Ring Light						Back Light	
		S40-75	S80-25	S80-55	Slim-Ringlight	S80-65N-2	S40-10D	TLS-BF	TLS-DF
Observation Methods	Brightfield (BF)	●	●	●	●	●		●	
	Directional BF, segmented LEDs	●	●	●	●	●		●	
	Darkfield (DF)						●		●
	Directional DF, segmented LEDs						●		●
	Polarization	●		●		●		●	
	Segmented Polarization			●					

System Diagram for VisiLED Series



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