



SCHOTT
glass made of ideas

We help you
see more
Lighting and Imaging

Customized Solutions for Light and Image Transfer Based on Glass Fiber Optics and LED Technology

Highest reliability

Leading-edge product performance

PURAVIS® eco-friendly optical fibers

Over 50 years of know-how

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Worldwide Presence



Large Portfolio of Capabilities

Materials and Basic Processes

Glass development

Innovative melting

Proprietary glass portfolio

Design Capabilities

Mechanical

Optical

Electronics

Thermal

Production Capabilities

Fiber drawing

High-volume assembly

Optical component manufacturing

Partners in Developing Solutions that Exceed Expectations and Set New Standards



Application consulting

Joint product development

Integrated logistics and production concepts

Product and technology training

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Product Portfolio: Light Guides, Image Guides, Light Sources

Light Guides



Image Guides



Light Sources



Serving Markets in Three Strategic Business Fields

Medical



Medical Components

Industrial



Industrial Components



Microscopy



Aviation



Automotive

Defense



Defense

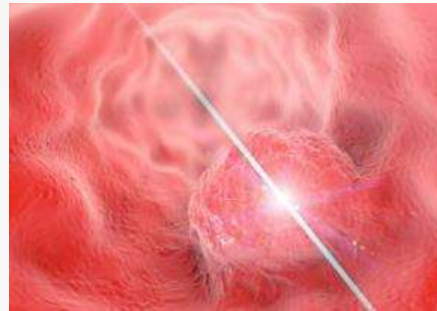
Passionate About Innovation

SCHOTT® SingleEZ* Family



Easy-to-handle illumination
for single-use endoscopes

SCHOTT® Luminous Diffusers



Precise laser light radiation
for medical treatments

SCHOTT® Jade Reading Light



Made from glass and operated
via touch technology

**Single-use glass fiber illumination made easy*



Medical Components

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Seeing More Improves Diagnosis and Treatment

Endoscopy & robotic surgery

Illumination for re-usable and single-use endoscopes,
Imaging components

Dentistry

Illumination for handpieces and instruments

Laser treatment

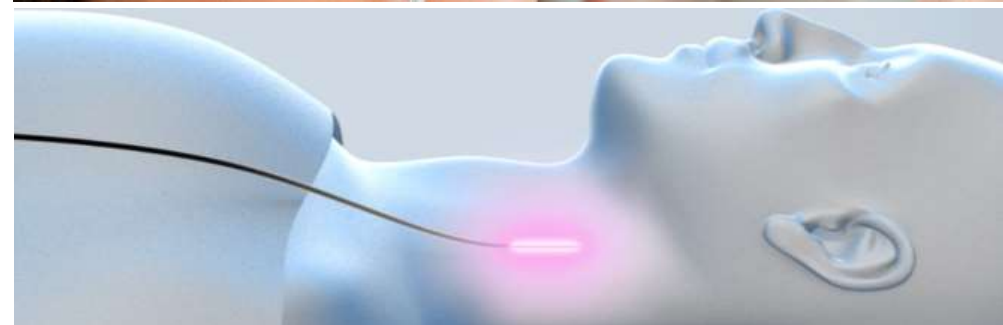
Laser-emitting diffusers for various medical treatments

In-vitro diagnostics

Multi-leg light guide subassemblies and light sources

Surgical microscopy

Lighting components



Flexible Light and Image Guides

PURAVIS® glass optical fibers

Superior optical performance and longevity

Flexible light guides

Customized design with high-volume manufacturing

Flexible image guides

4- μm fibers enable highest resolution images

Laser-emitting diffusers

Extremely homogenous laser light radiation



Rigid Light and Image Guides

Light guide rods

Individual design options: tapered, bent, multi-tapered/-bent

Fiber optic cones

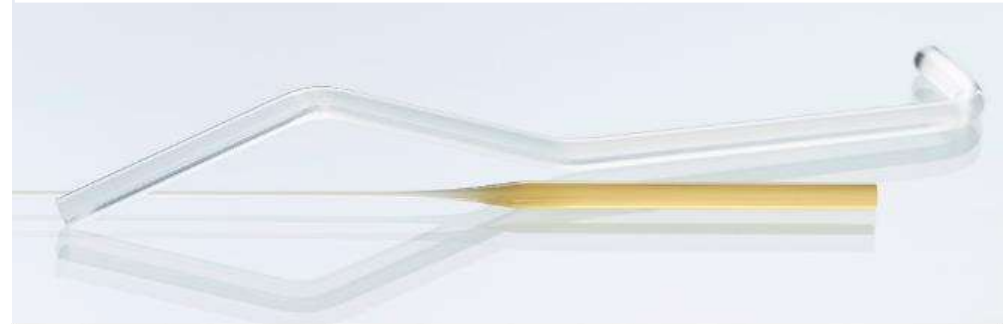
Effective coupling of light

Tapers

Reduce or magnify images

Faceplates

High resolution, “zero-thickness” image transfer



A photograph of an industrial factory floor featuring several white robotic arms in a line. The focus is on the foreground arm, with others receding into the background. The scene is brightly lit, and the machinery is clean and modern.

Industrial Components

Sensor, Metrology and Control Applications

Image transfer

Locations where cameras or electronics can't be mounted

Pyrometry

Infrared scanners and thermal imaging

High voltage direct current

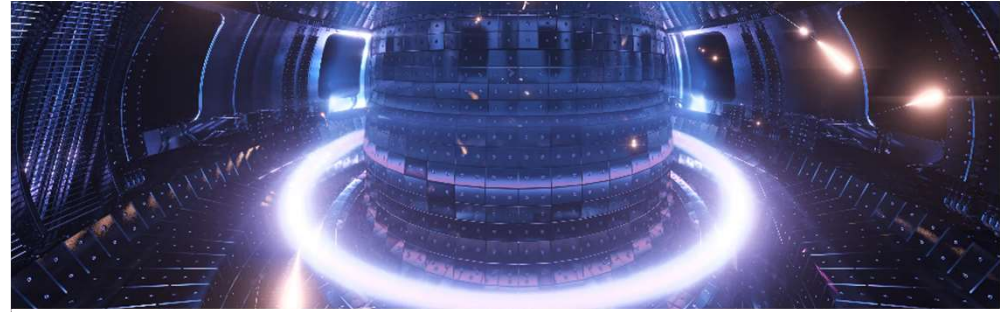
Transporting energy

Sensing and metrology

Highly accurate measurement in harsh environments

Spectroscopy

Food and chemical analysis as well as space exploration



Flexible and Rigid Components

Flexible imaging bundles

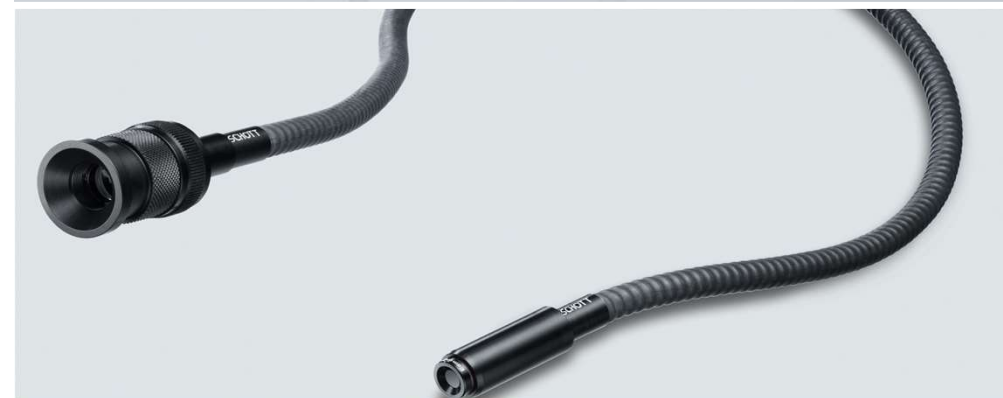
High-resolution image transfer

Flexible light guides

Highly heat resistant illumination for harsh environments

Broad range of glass types

Enabling infrared and near-infrared applications





Microscopy

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Stereomicroscope Illumination

Laboratory & Diagnostics

Fluorescence-based applications; applications requiring natural color reproduction

Industrial Applications

Material science; industrial inspection

Education

Ideal for educational applications

Forensics

Help make hidden details visible



Fiber Optic and LED Lighting Systems and Accessories

EasyLED Series

Professional direct LED illumination system

VisiLED Series

Advanced direct LED illumination series

KL Series

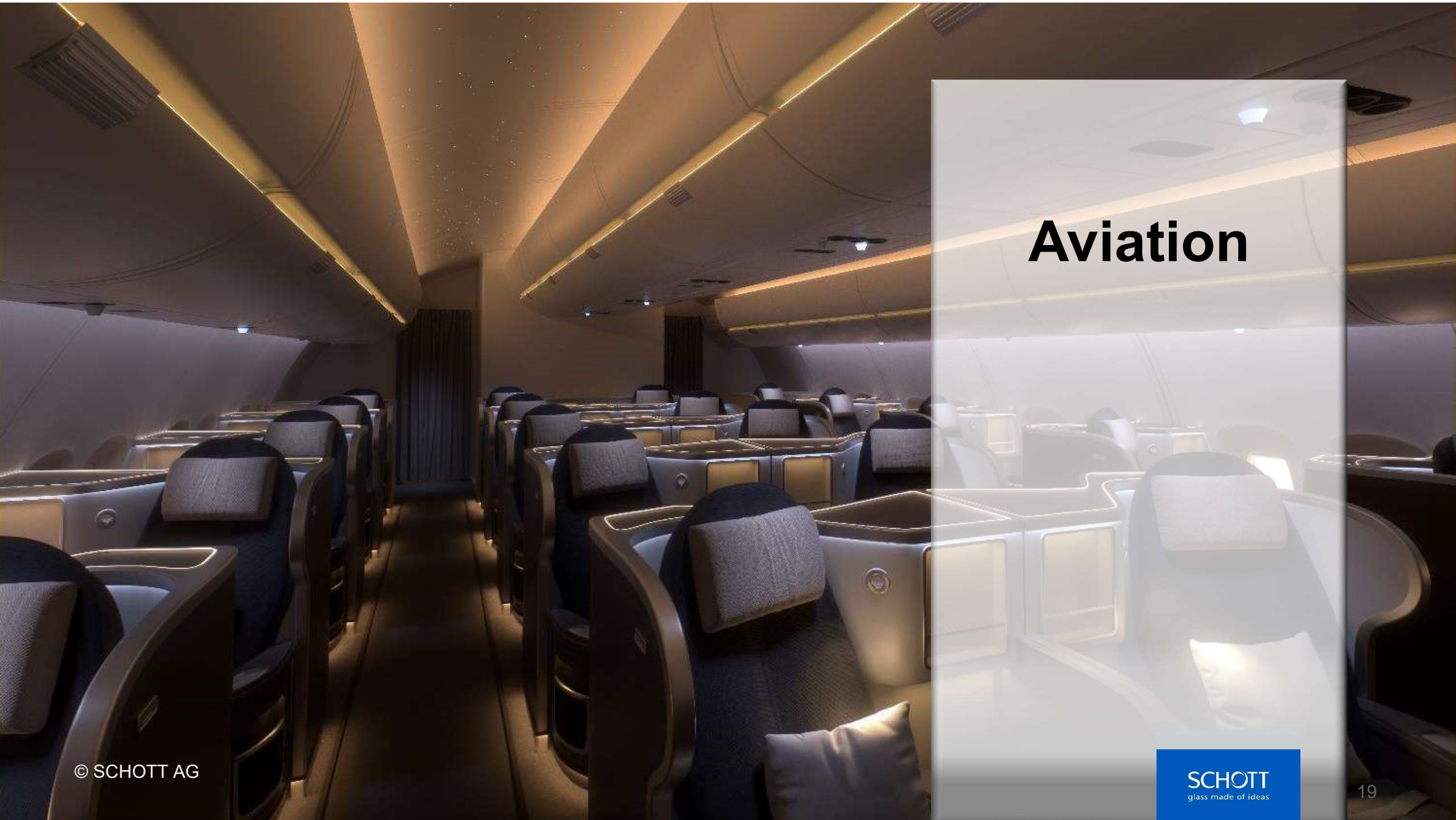
Modular fiber optic lighting system

ColdVision Series

Fiber optic illumination for harsh environments

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Aviation

Perfect Lighting. Perfect Atmosphere.

Decorative Cabin illumination

Decorative light elements for cabin illumination concepts

Seat and Monument illumination

Connecting design and function in our integrated approach to seat and monument lighting



Decorative Cabin Illumination

SCHOTT® HelioFlex

Star ceiling and fiber optic spot illumination

SCHOTT® HelioLine

Side-emitting contour lighting for direct view

SCHOTT® HelioCurve LED Strip

Flexible contour lighting for indirect illumination



Seat Illumination

SCHOTT® Opal Reading Light

Compact elegant in-seat reading light

SCHOTT® Jade Reading Light

Smart in-seat reading light based on glass and touch technology

SCHOTT® Sapphire Design Concept

Modern compact in-seat reading light

SCHOTT® HelioLine Contour Light

Side-emitting fiber optic lighting for direct view

SCHOTT® HelioCurve LED Strip

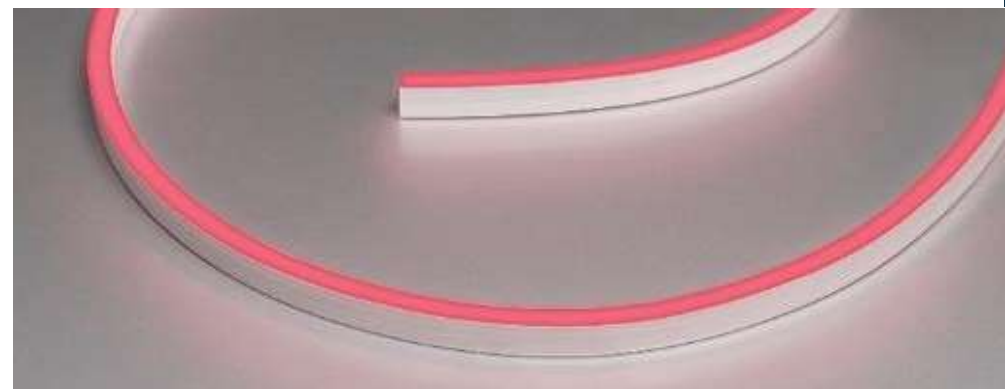
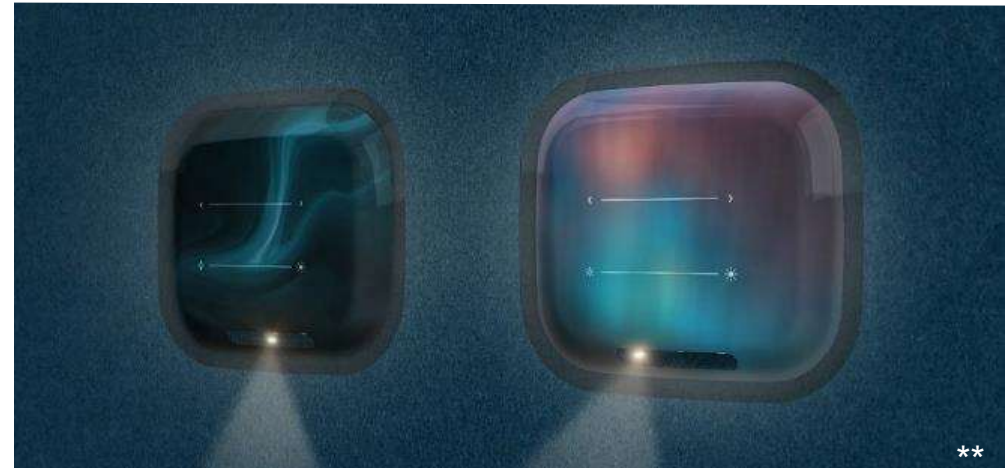
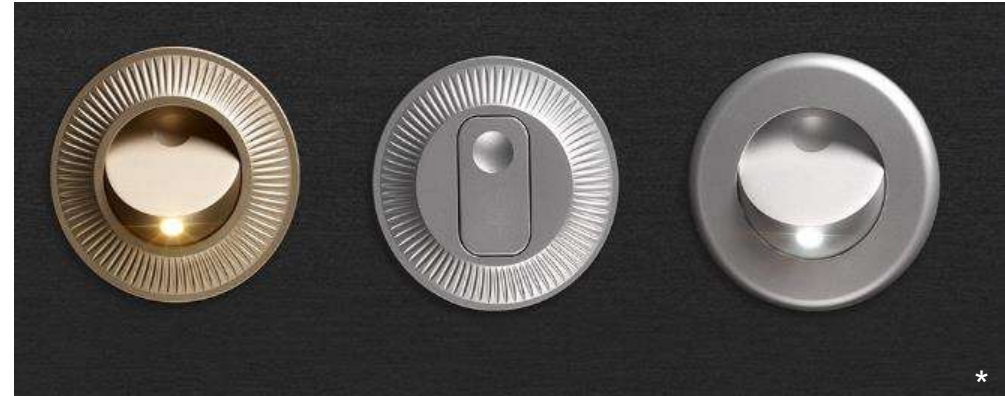
Flexible contour lighting for indirect illumination

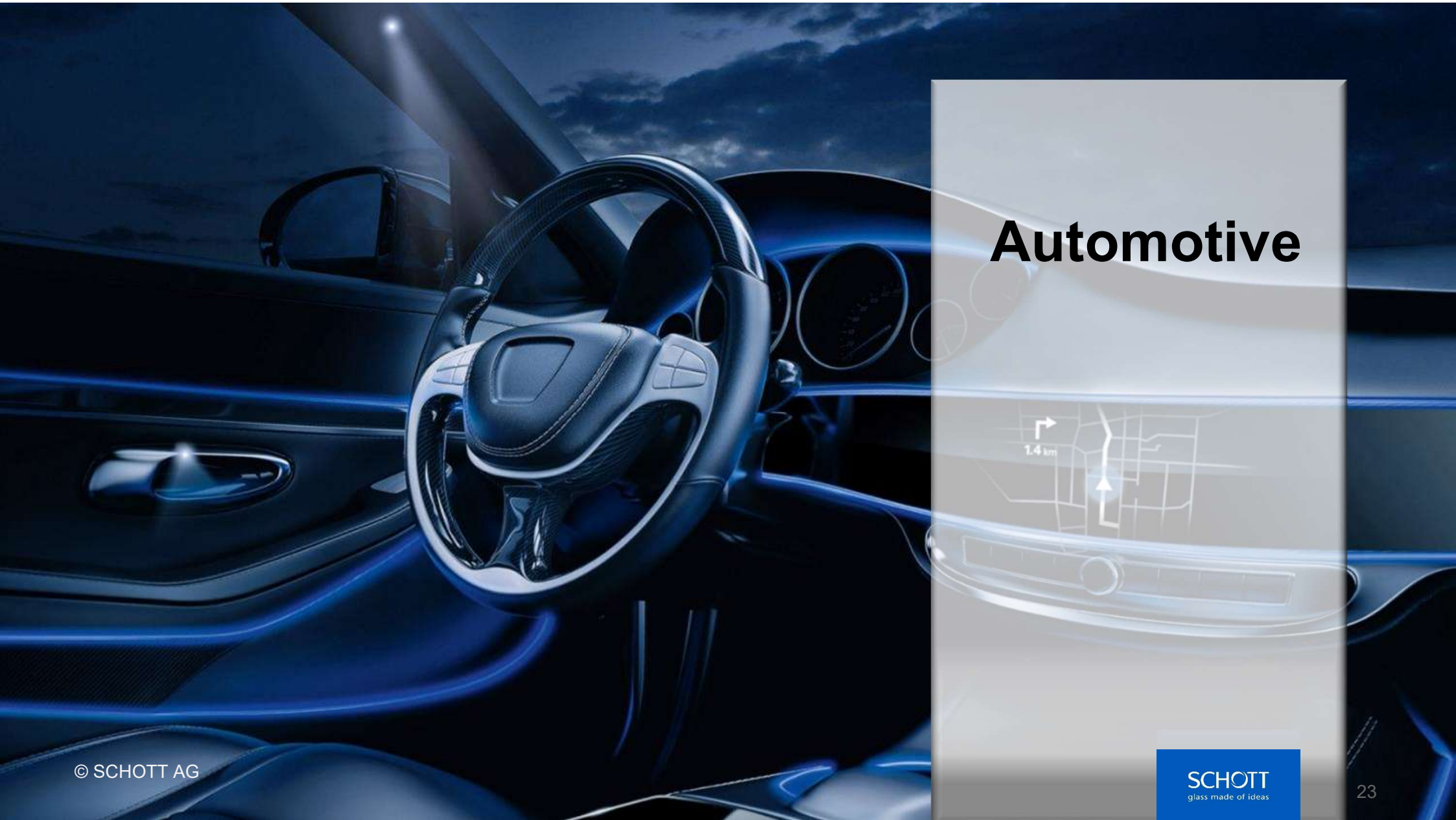
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* *Opal Ray designed by PearsonLloyd.*

** *Jade designed by PriestmanGoode.*

*** *Sapphire designed by PriestmanGoode.*





Automotive



Light Facilitates Comfort and Security for Drivers

Exterior lighting

Sleek fiber optic light guides, powered by an LED or laser light source, for flexible and homogeneous illumination

Interior lighting

Ambient lighting solutions that turn driving into an on-board experience and enhance brand recognition



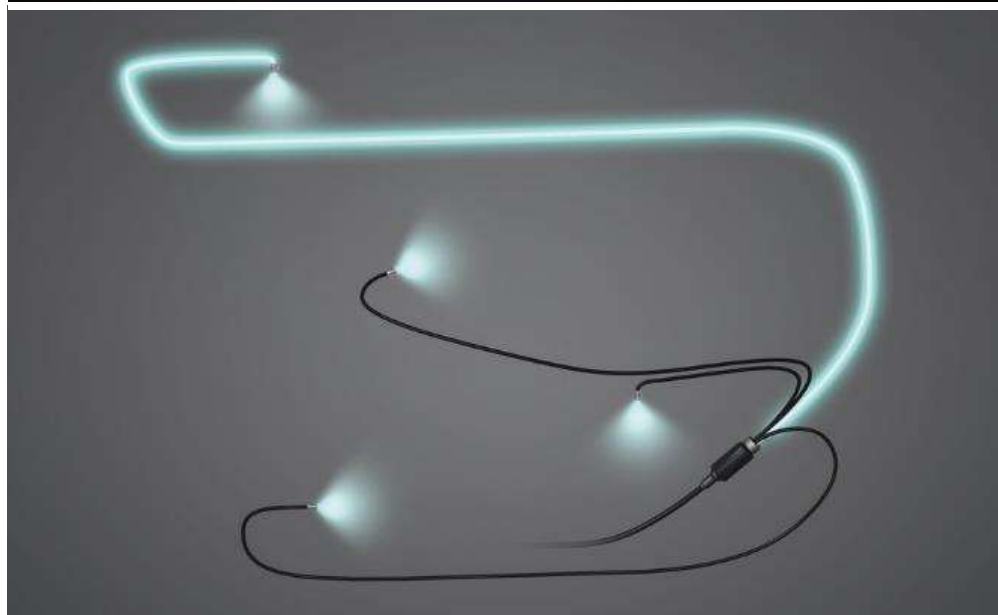
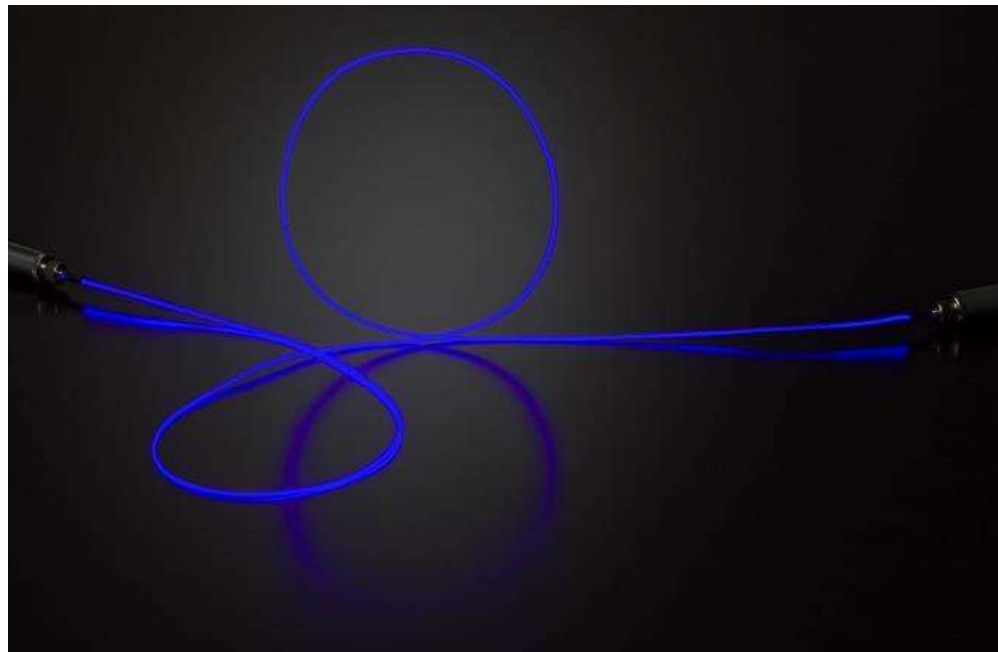
SideLight and MultiLight

SCHOTT® SideLight solutions

Patented technology using glass fiber optics to answer the high demand for automotive interior and exterior lighting applications

SCHOTT® MultiLight harness

Contour and spot lights using one light source can illuminate door panels and map pockets, creating an individual, comfortable atmosphere





Defense

Night Vision and Situational Awareness

Night Vision

Night vision systems and cameras, avionics packages, sensors and other technologies relying on fiber optic components

Situational Awareness

Situational awareness products containing both imaging components for aiming and observation as well as direct sensing components



Defense Components

Inverters

Turning inverted images back right side up

Straight Thrus

Transmitting a 1:1 image from its input to its output

Tapers

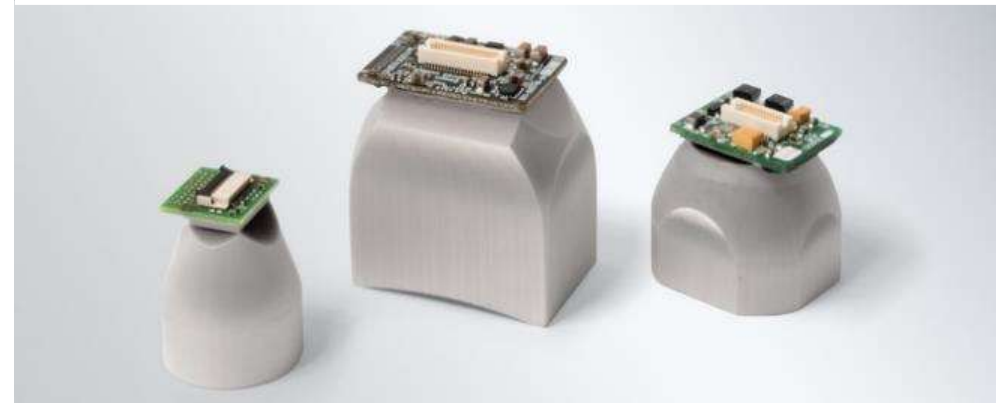
Magnifying or reducing an image

Fiber Optic Sighting Systems

Direct view auxiliary targeting sights

Image Bundles

Transferring images from remote locations



Thank you!

Back-up

We are
driven
by the
challenges
that our
customers
and markets
face





SCHOTT® SingleEZ illumination system

Enhancing endoscopic procedures with easy-to-handle glass fiber optic illumination system.

Smart and cost-effective solution for manufacturers of single-use endoscopes.

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SCHOTT® Luminous laser light-emitting diffusers

High-performance glass-based diffusers radiate laser light extremely homogeneously and efficiently.

Enabling more effective medical treatments.

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SCHOTT® Jade reading light

First reading light ever made from glass and operated via touch technology.

Offering an integrated ambient light and bringing haptic and optical aesthetics as well as unlimited design options into aircraft interiors.



**The heart of our
fiber optics:
PURAVIS®**

Outstanding transmission
of white light

Low dispersion with high
color uniformity

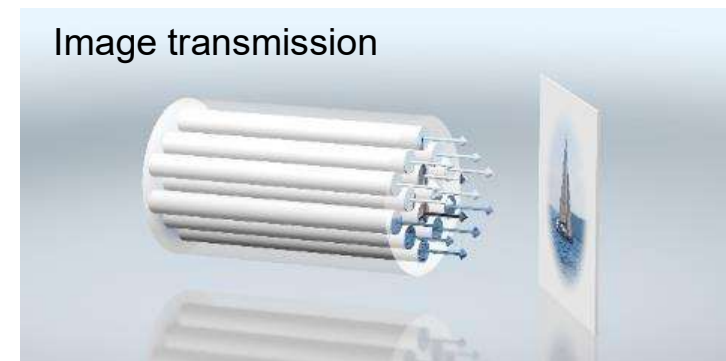
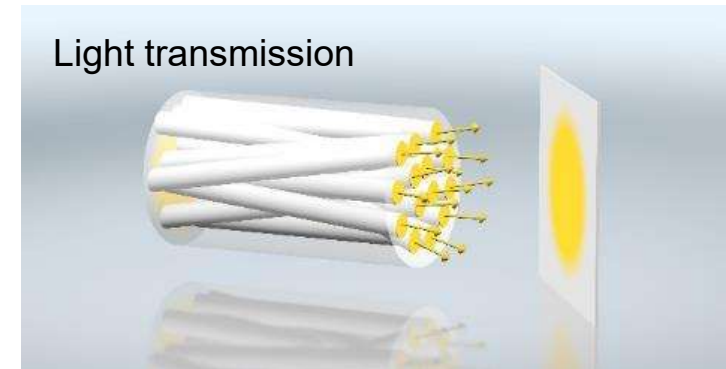
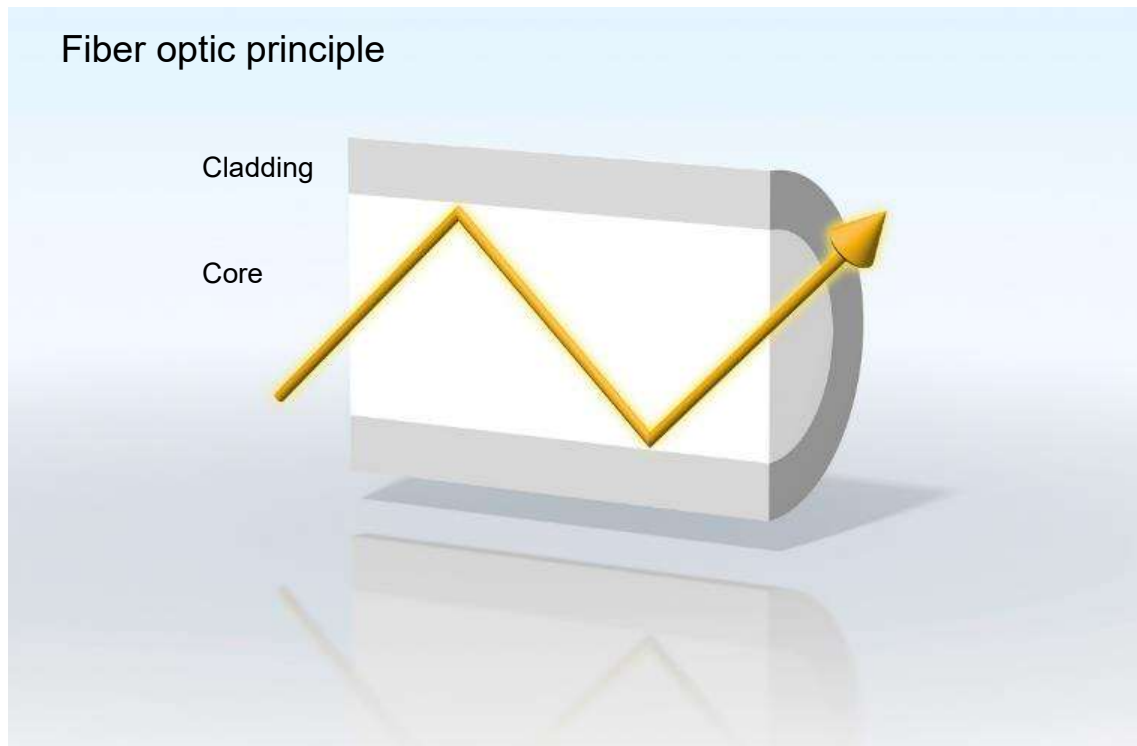
Low solarization

Improved chemical
resistance

Enhanced transmission in
near UV range

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Glass optical fibers enable light and image transmission



Unique SideLight technology

Flexible side-emitting light guides

High aesthetic appeal

Very homogenous light distribution

Design flexibility; small bending radius

Easy to install

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