

SCHOTT® Ruggedized Remote Passive Viewing Systems

Flexible and Rigid Imaging Fiber Bundle Systems



Photo courtesy of the Department of Defense

Using our Wound Image Bundles, soldiers can see outside armored vehicles while remaining safely inside.

Performance Characteristics

Wound Fiber Bundles are coherent, flexible fiber optic bundles used in applications where images must be transferred from remote locations. These bundles are used in a wide range of applications, including industrial remote vision systems, ordered array detectors, hazardous environment imaging, defense and research.

Their numerical aperture is typically 0.63 and standard lengths range from 610 mm to 4500 mm.

SCHOTT can also produce custom image guide assemblies in vertical or horizontal formats required to meet nonstandard imaging applications.

SCHOTT
glass made of ideas

Typical Bundle Specifications

Glass Type:	SCHOTT 75 glass or equivalent
Quality Area:	1.8 x 1.8 mm ² – 38 x 33 mm ² with custom capabilities
Format Size:	2 mm x 2 mm up to 40 mm x 35 mm
Single Fiber Size:	60 x 60 um, 10 um elements, 6 x 6 array
Numerical Aperture:	0.58
Resolution*:	45 lp/mm
Transmission:	40% @ 500 nm – 1200 nm
Bending Radius:	Determined by bundle diameter and sheathing
Temperature Resistance:	-40 °C to +125 °C (-40 °F to +257 °F)
Chemical Resistance:	Select sheathing resistant against oil, grease, bases acid, fuel, water and PVC
Color of cable:	Blue, Black (Others upon request)
Weight of cable:	Determined by bundle diameter and sheathing

* Resolution Measurement performed with an 1951 USAF Resolution Target using diffuse white light illumination. Resolution may vary with other wavelengths.

Example application of remote viewing through a SCHOTT Wound Image Bundle.



For more information please contact

Lighting and Imaging
SCHOTT AG
 Otto-Schott-Str. 2
 D-55127 Mainz, Germany

Phone: +49 (0)6131/66-7798
 Fax: +49 (0)6131/66-7705
lightingimaging@schott.com
www.schott.com/lightingimaging

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