



# VISIBLE WAVELENGTH COMBINER

## Fused Fiber Combiner

### DATASHEET

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Gooch & Housego visible wavelength combiners are single mode optical fiber components and modules.

They enable any two or three primary colors in the visible wavelength region to be combined or separated.

Designed for applications in display systems, sensors and biomedical equipment, the combiners utilize G&H's low loss fused fiber technology.

No light leaves the fiber and therefore no alignment is required; and there are no unwanted reflections. Furthermore the output fiber pigtails may be directly integrated into beam delivery systems.

Combiners are available for either 2 or 3 wavelengths: 2 wavelength combiners combine red/green, blue/green or red/blue light. 3 wavelength combiners provide full RGB operation; enabling full color displays.

All variants are available on a custom basis, so please contact us to discuss your specific requirements.



### Key Features

- 2 or 3 color combining or separating
- All fiber - no lens alignment
- No unwanted reflections
- Low light loss
- High power handling
- Custom Product

### Applications

- Visible and display systems
- Sensors
- Biomedical equipment
- Research

## Example Optical Specifications<sup>1</sup>

### Two Wavelength Combiner

Parameter	Specification	
Operating wavelengths	Blue/green	457/532 nm
	Green/red	532/633 nm
	Blue/red	457/633 nm
Channel transmission	Minimum	90%
Channel transmission	Typical	95%
Fiber type	Speciality single mode fiber	
Housing	Semi-ruggedized housing Ø5.0 x 85 mm	
Operating/storage temperature range	-5 - +75°C/-40 - +85°C	

### Three Wavelength Combiner

Parameter	Specification			
	Red	Green	Blue	
Operating wavelengths	630, 633, 655 nm	532 nm	457, 460, 488 nm	
Channel transmission	Minimum	85%	85%	65%
Channel transmission	Typical	90%	90%	70%
Fiber type	Speciality single mode fiber			
Fiber cut-off wavelength	430±20 nm			
Housing	Anodized aluminum housing 110 x 45 x 10 mm			
Operating/storage temperature range	-5 - +75°C/-40 - +85°C			

<sup>1</sup> Please contact the sales office for a specification and quotation based on your exact requirements.

**Ordering Information:**



800 Village Walk #316  
 Guilford, CT 06437  
 Ph: 203-401-8093

Email orders to: [sales@xsoptix.com](mailto:sales@xsoptix.com)  
 Fax orders to: 800-878-7282

For further information

E: [toquaysales@goochandhousego.com](mailto:toquaysales@goochandhousego.com)

[goochandhousego.com](http://goochandhousego.com)

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