



# Gooch & Housego

## Visible Wavelength Combiner



G&H's Visible Wavelength Combiners are singlemode optical fibre components and modules. They enable any two or three primary colours in the visible wavelength region to be combined or separated.

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

No light leaves the fibre and therefore no alignment is required; and there are no unwanted reflections. Furthermore the output fibre pigtailed 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. 3 wavelength combiners provide full RGB operation; enabling full colour displays.

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

### Key Features:

- 2 or 3 colour combining or separating
- All fibre – 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	Unit
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	%
Fibre type		Speciality singlemode fibre	
Housing		Semi-ruggedised housing Ø5.0 x 85	mm
Operating / storage temperature range		-5 to +75 / -40 to +85	°C

### Three Wavelength Combiner

Parameter		Specification			Unit
		Red	Green	Blue	
Operating wavelengths		630, 633, 655	532	457, 460, 488	nm
Channel transmission	Minimum	85	85	65	%
Channel transmission	Typical	90	90	70	%
Fibre type		Speciality singlemode fibre			
Fibre cut-off wavelength		430±20			nm
Housing		Anodised Aluminium housing 110 x 45 x 10			mm
Operating / storage temperature range		-5 to +75 / -40 to +85			°C

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