

Gooch & Housego



OCT Coupler Ultra-Wideband (up to $\pm 130\text{nm}$)

Fibre optic couplers are used in the OCT light engine to form the interferometer that OCT systems use to generate depth information. Our ultra-wideband component has been developed for use in high resolution OCT imaging systems.

The OCT Wideband Coupler splits over a wide bandwidth and can be ordered to operate at any of the popular OCT wavelength bands (850nm, 1060nm & 1300nm).

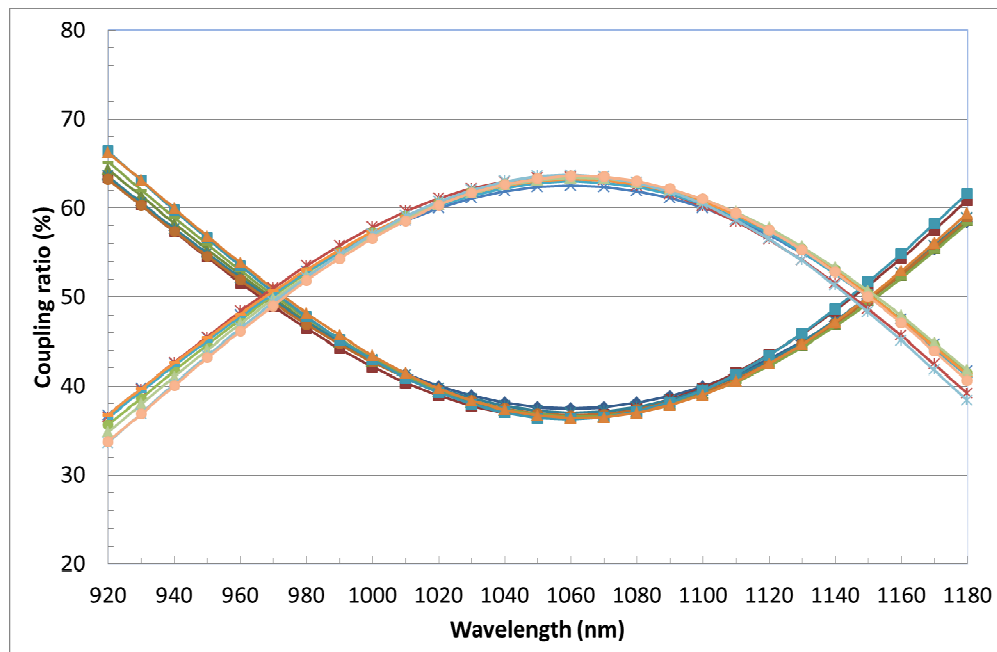
Designed for low loss and ultra wide bandwidth operation, the coupler utilises Gooch & Housego's proprietary fused fibre technology.

Key Features:

- Ultra-wide bandwidth
- Any coupling ratio available
- Very low light loss
- Various fibre options available

Associated Documents:

- OCT Coupler 850nm & 1300nm
- OCT Coupler 1060nm
- OCT Fibre Collimators
- OCT Coupler Application Note



A sample of 50/50% couplers plotted in the wavelength range 920nm to 1180nm



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<http://www.optoscience.com>

東京本社 〒160-0014 東京都新宿区内藤町1番地 内藤町ビルディング
TEL:03(3356)1064 FAX:03(3356)3466 E-mail:info@optoscience.com
大阪支店 〒532-0011 大阪市淀川区西中島7-7-2 新大阪ビル西館
TEL:06(6305)2064 FAX:06(6305)1030 E-mail:osk@optoscience.com
名古屋営業所 〒450-0002 名古屋市中村区名駅2-37-21 東海ソフトビル
TEL:052(569)6064 FAX:052(569)8064 E-mail:ngo@optoscience.com

Optical Specifications

Optical specifications can vary between wavelength bands and chosen bandwidths. In the case of Ultra-wideband OCT couplers, Gooch and Housego provide specifications upon request. Please see the OCT Coupler Application Note for guidance on Ultra-Wideband optical performance.

Parameter	Specification	Unit
Operating / Storage Temperature Range ₁	-40 to +75 / -40 to + 85	°C
Pigtail Tensile Load	5	N
Fibre Type ₂	Speciality singlemode fibre	

1. For connectorised component, operating temperature range is -5 to +75°C.
2. Fibre type to be confirmed upon request.

Housing Option

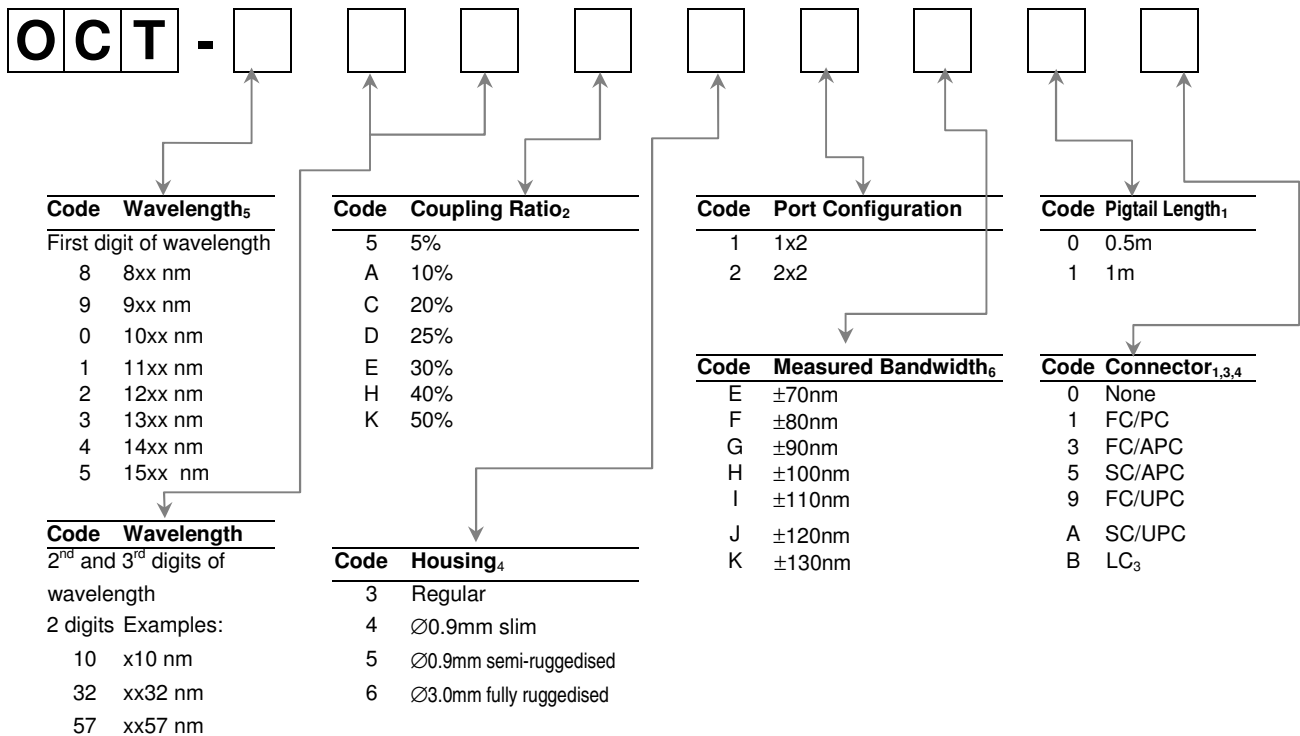
Housing Code	Description	1x2, 2x2 Dimensions (mm)	Pigtail
3	Regular	3.0 (Ø) x 50 (L)	Primary-coated fibre
4	Ø0.9 mm slim	3.0 (Ø) x 60 (L)	Ø 0.9mm loose-tube
5	Ø 0.9 mm semi-ruggedised	5.0 (Ø) x 75 (L)	Ø 0.9 mm loose-tube
6	Ø 3.0 mm fully-ruggedised	80 (L) x 10 (W) x 8 (H)	Ø 3.0 mm fan-out sleeving

Configuration



Ordering Code Information

OCT-040K31J10 (OCT Wideband Coupler, 1040nm centre wavelength, 50/50 coupling ratio, regular housing, 1x2 port configuration, ±120nm measured bandwidth, 1m pigtailed, no connectors)



1. Minimum pigtail length. Further pigtail lengths available on request. Where connectorised, pigtail length is to connector end face.
2. Any coupling ratio available. Please contact G&H for ordering codes of coupling ratios not listed.
3. LC connector not available for housing code 6, fully ruggedised housing.
4. Connectors may be fitted to housing types 4, 5 and 6. For connectorisation of housing type 3 please contact the sales office.
5. Various fibre options available. Please contact sales office to discuss fibre choice.
6. G&H can provide performance specifications prior to order placement.