

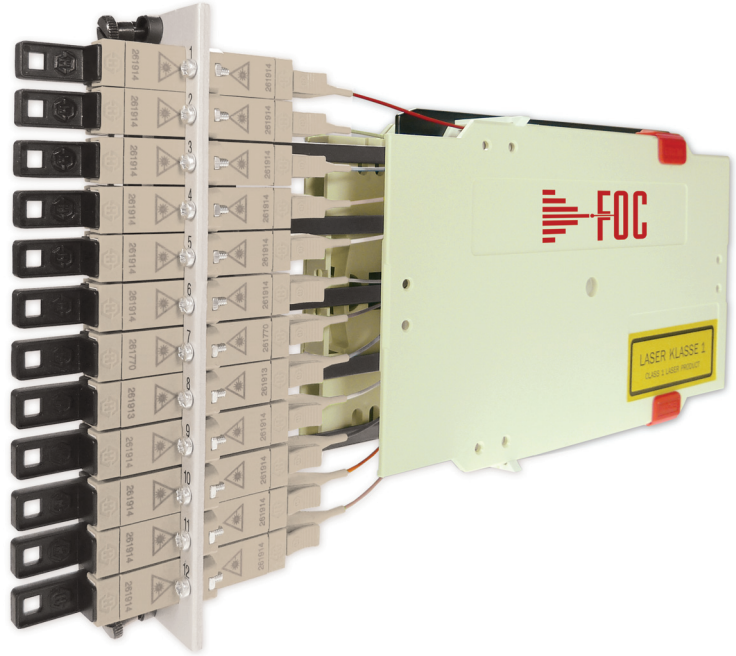
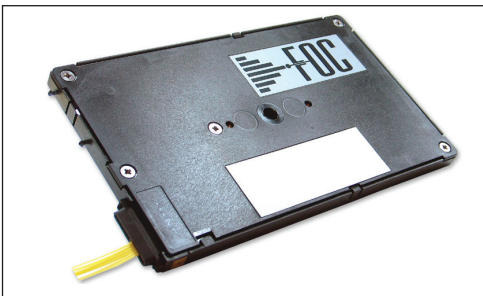


For a complete overview of components visit our website at www.foc-fo.com.

Components ▶ Couplers ▶ Multimode Couplers ▶

Multimode Coupler Modules

For the wavelength range 820 ± 40 nm, 1300 ± 40 nm, 780-1340 nm



Optical couplers modules are passive optical devices which allow the distribution and combination of optical signals. They are used in private fibre-optic networks as nodes for data transmission. Further fields of application are in measurement set-ups, sensor and automation systems.

Coupler modules consist of a set of different or identical fusion couplers which are manufactured on the basis of a combination of etching technology and the Fused Biconical Taper (FBT) principle.

Coupler modules are specially designed for installation into racks and distribution frames, but also for measurement setups in laboratories. They can be used in all places where extreme mechanical and climatic stability with ease of operation are required.

Features

- Low insertion loss and excess loss, i.e. extremely low loss within the established fibre-optic network
- High return loss, i.e. no reflections interfering with the transmitter in analogue systems
- High thermal and mechanical stability
- Available in various designs, i.e. optimal solutions for each individual application with respect to optical and mechanical characteristics (s. table "Designs")

- Free choice of configurations: The common configurations are described in the "Optical Specifications" chart. Additional configurations (e.g. 1x7 or 1x11) can be provided on customer demand.
- Coupler Modules come in distinct types, wavelength selective or with broadband properties:

Multimode coupler modules types

Multimode coupler modules for the first optical window

These couplers are optimised for the first optical window and guarantee constant optical parameters for 820 ± 40 nm.

Multimode coupler modules for the second optical window

These couplers are optimised for the second optical window and guarantee constant power splitting and insertion loss across the wavelength range from 1260 nm to 1340 nm.

Wavelength independent multimode coupler modules

Wavelength independent modules are optimized for the first and second optical window. They guarantee constant optical parameters and are suitable to work over the full range from 780 nm to 1340 nm.

For check lists and additional ordering information for our products visit our website or see separate data sheets.



Optical Specifications

Wavelength range: 820 ± 40nm, 1300 ± 40nm or 820 - 40 nm to 13040 + 40 nm

Insertion loss Tree coupler modules (1xN; 2xN)	
Configuration	Maximum insertion loss [dB]
1x2	4,0
1x4, 2x4	8,0
1x6	11,0
1x8, 2x8	12,0
1x12	15,0
1x16, 2x16	16,0
1x32, 2x32	20,0

Insertion loss Star coupler modules (N x N)	
Configuration	Maximum insertion loss [dB]
2x2	4,0
4x4	8,5
8x8	12,5
16x16	16,5
32x32	20,5

For coupler modules with connectors or adapters the above insertion loss values must be increased. (see separate data sheet)

Parameters for coupler modules from other fibres or with other power distribution on request.

Designs

Size	Description	Dimensions [mm]	Configurations	Interface type
10	Standard modul	92 x 9,5 ⁽¹⁾ x 155	up to 66 ports	tube or cable
19	19" 1HU Fiberbox	483 x 44 x 262	up to 33 ports	mating adapters at front
30	19" 3HU 7DU closed	35,6 x 128, 5 x 160	up to 9 ports	mating adapters at front
31	19" 3HU 7DU compact	35,1 x 128, 9 x 224	up to 12 ports	mating adapters at front
40	small table top size	135 x 40 x 185	up to 6 ports	mating adapters at front
41	large table top size	135 x 80 x 185	up to 10 ports	mating adapters at front
50	ETSI 2SU Variobox	533 x 50 x 152	up to 25 ports	mating adapters at front

⁽¹⁾High depends on configuration

