



## 1xN (2xN) Single Mode Coupler Module

1xN (2xN) coupler splitter modules are cascaded with the single mode couplers. These modules are widely used for FTTH, LAN, and CATV optical networks.

### Key Features

- Low excess loss
- Uniform power splitting
- Rugged package
- Excellent environmental & mechanical stability

### Applications

- Long-haul telecommunications
- Digital, hybrid and AM-Video systems
- CATV systems
- High speed local area networks
- Fiber sensors



## For more Info

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## 1xN (2xN) Single Mode Coupler Module

### Performance Specifications

Parameter	Unit	Standard Type Coupler Module (SSSC); Wide Band Coupler Module (SWBC)															
		N×4		N×6		N×8		N×12		N×16		N×24		N×32			
		N=1, 2		N=1, 2		N=1, 2		N=1, 2		N=1, 2		N=1, 2		N=1, 2			
Operating wavelength	nm	1310 or 1550, others on request															
Operating bandwidth	nm	SSTC: ±15; SWBC: ±40															
Grade	-	P	A	P	A	P	A	P	A	P	A	P	A	P	A		
Insertion loss	dB	≤6.9	≤7.3	≤9.0	≤9.6	≤10.4	≤11.0	≤12.4	≤13.2	≤13.8	≤14.6	≤15.8	≤16.8	≤17.4	≤18.4		
Typical excess loss	dB	0.25		0.3		0.4		0.5		0.55		0.6		0.7			
PDL	dB	≤0.25		≤0.35		≤0.35		≤0.45		≤0.45		≤0.55		≤0.55			
Operating temperature	°C	-40 ~ +85															
Fiber lead length	-	1 meter, others on request															
Fiber type	-	900μm, 2mm, 3mm loose tube															
ABS Box Dimensions(L×W×H)	mm	100×80×10						120×80×18						140×115×18			

Parameter	Unit	Dual Window Coupler Module (SDWC); Three-Window Coupler Module (STWC)															
		N×4		N×6		N×8		N×12		N×16		N×24		N×32			
		N=1, 2		N=1, 2		N=1, 2		N=1, 2		N=1, 2		N=1, 2		N=1, 2			
Operating wavelength	nm	SDWC: 1310 and 1550; STWC: 1310, 1490 and 1550															
Operating bandwidth	nm	SDWC: ±40; STWC: 1310 ±40, 1490 ±10 and 1550 ±40															
Grade	-	P	A	P	A	P	A	P	A	P	A	P	A	P	A		
Insertion loss	dB	≤7.2	≤7.6	≤9.6	≤10.2	≤10.8	≤11.4	≤13.2	≤14.0	≤14.4	≤15.2	≤16.8	≤17.8	≤18.0	≤19.0		
Typical excess loss	dB	0.3		0.4		0.45		0.55		0.6		0.7		0.75			
PDL	dB	≤0.3		≤0.4		≤0.4		≤0.5		≤0.5		≤0.6		≤0.6			
Operating temperature	°C	-40 ~ +85															
Fiber lead length	-	1 meter, others on request															
Fiber type	-	900μm, 2mm, 3mm loose tube															
ABS Box Dimensions(L×W×H)	mm	100×80×10						120×80×18						140×115×18			

- Above specification are for device without connector, and may change without notice. All parameters are tested at room temperature.
- Other specifications can be made on customer request.
- For devices with connectors, IL will be 0.3dB higher, RL will be 5dB lower.
- If there is pulse application, please be sure to inform us of pulse energy and peak power.

### Order information P/N: FBTC-①-②-③-④-⑤-⑥-⑦-⑧-⑨

When you inquire, please provide the correct P/N number according to our ordering information, and attach the appropriate description would be better. If need any connector, we do not recommend choosing a 250μm bare fiber pigtail.

①	②	③	④	⑤	⑥	⑦	⑧	⑨
Type	Grade	Wavelength	Coupling Ratio (dB)	Port	Fiber Type	Pigtails Diameter	Fiber Length	Connector
SSSC	P: P Grade	13:1310nm	AV: even	104:1x4	S28:SMF-28e	25:250μm	05:0.5m	00:None
SWBC	A:A Grade	14:1490nm	XX: others	204:2x4	X:Others	90:900μm	10:1.0m	FP: FC/PC
SDWC		15:1550nm		106:1x6		20:2.0mm	15:1.5m	FA: FC/APC
STWC		1315:1310&1550nm		206:2x6		30: 3.0mm	XX: Others	SP: SC/PC
		131415:1310&1490&1550nm		108:1x8		XX: Others		SA: SC/APC
				208:2x8				ST: ST/PC
				112:1x12				LP: LC/PC
				212:2x12				LA: LC/APC
				Etc.				XX: Others

**Part Number Example #1:** FBTC-SSSC-P-15-AV-106-S28-90-10-FA

**Description:** 1X6 Single Mode Standard Type Coupler Module, 1550nm, P grade, even coupling ratio, SMF-28e fiber, with 0.9mm OD loose tube, 1.0m length fiber pigtails, FC/APC connectors at all ports.

**Part Number Example #2:** FBTC-SDWC-P-1315-AV-105-S28-90-10-FA

**Description:** 1x5 Single Mode Dual Window Coupler Module, 1310&1550nm, P grade, even coupling ratio, SMF-28e fiber, with 0.9mm OD loose tube, 1.0m length fiber pigtails, FC/APC connectors at all ports.

### Ordering Information for Custom Parts

If you need to customize other specifications, please provide detailed description for your requirement.