



## TECOS In-Line Exchangeable Tuneable Filter Modules and Filter Cassettes

This system - consisting of filter holders for one (TFM) or for two (WTFM) filter cassettes (FC) – is used by the most innovative photonic institutes and universities around the world. These devices are of exceptional high quality and accuracy, ensuring stable performance and predictable results.

### Tuneable Filter Module (Holder) TFM or WTFM

#### Application

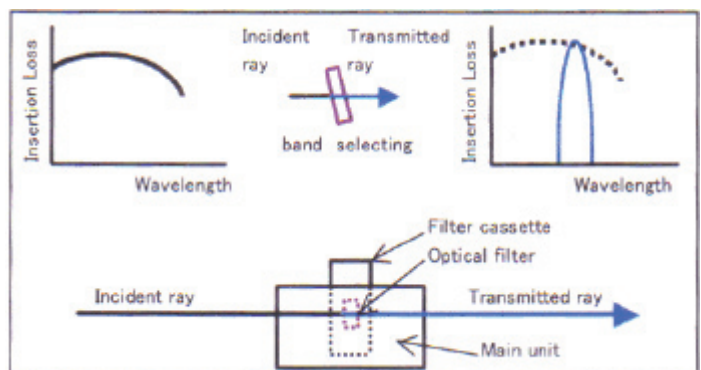
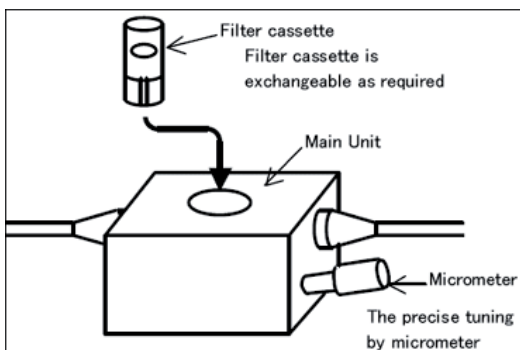
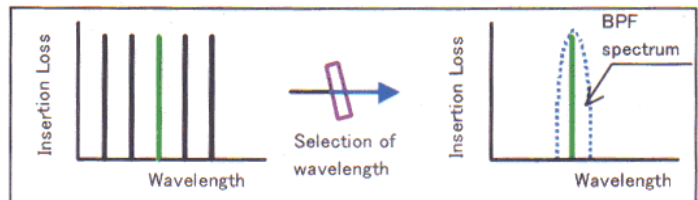
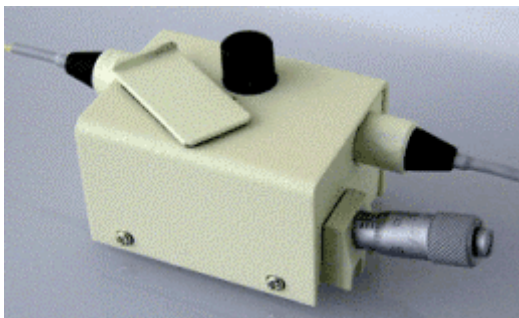
- In-Line Fibre testing
- Passive component testing and measuring
- Research and development of optical fibre communication
- Test and selection of various filters
- Wavelength selection in WDM systems (in combination with LED/ASE light source)

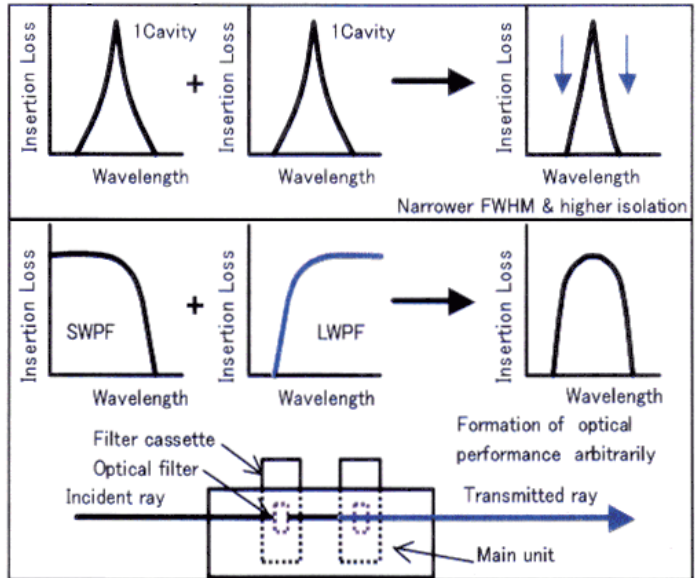
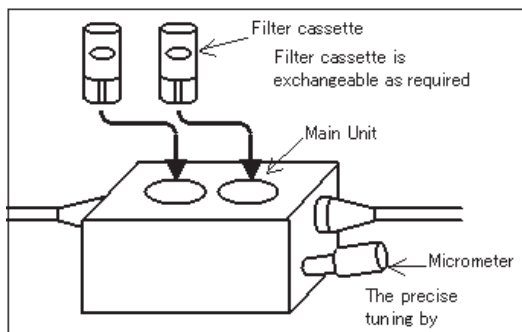
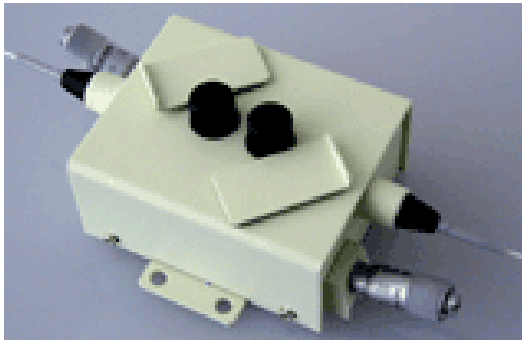
#### Features

- Designed to work with exchangeable filter cassettes (FC)
- Exact wavelength tuning by micrometer
- Tuning range – 20 nm
- Wide variety of filter cassettes available
- **WTFM** could also be operated with one filter, or with filter combinations such as BPF + BPF, SPF + LPF, Etalon + BPF

#### Specifications

- Insertion Loss  $\leq 0.7$  dB
- Fibre types SMF, MMF, DSF\*, CSF\*, PMF-Y, PMF-X
- Dimensions TFM without protrusion parts – (L48xW43xH34)
- Dimensions WTFM without protrusion parts – (L62xW57xH34)





### Standard Modules \*

TFM-1550-S-FA	1510 – 1590 nm	SMF/FC/APC
TFM-1550-S-FS	1510 – 1590 nm	SMF/FC/SPC
TFM-1550-S-SA	1510 – 1590 nm	SMF/SC/APC
TFM-1550-S-SS	1510 – 1590 nm	SMF/SC/SPC
WTFM-1550-S-FA	1510 – 1590 nm	SMF/FC/APC
WTFM-1550-S-FS	1510 – 1590 nm	SMF/FC/SPC
WTFM-1550-S-SA	1510 - 1590 nm	SMF/SC/APC
WTFM-1550-S-SS	1510 - 1590 nm	SMF(SC/SPC

Standard Fibre length 1 m , O 0.9

### Centre Wavelengths:

1550 nm (Standard), 1260, 1310, 1360, 1400, 1450, 1500, 1600, 1650 nm  
Other wavelengths on request

### Fibre types and ordering information TFM or WTFM-1\*\*\*-

SMF	=	S
MMF	=	M
PMF-Y	=	PY
PMF-X	=	PX



**Connector types and ordering information TFM or WTFM- SC/APC\* SC/SPC\*  
\*\*need to be confirmed\*\***

FC/APC = FA  
 FC/SPC = FS  
 SC/APC\* = SA  
 SC/SPC\* = SS

need to be confirmed

**Example:**

**TFM-1550-S-FA** = Tuneable filter holder for one cassette, centre wavelength 1550 nm, SMF, FC/APC connector

**TECOS Exchangeable Tuneable Filter Cassettes (FC)**

Cassettes for TFM and WTFM



Mechanical Dimensions:  
 10 Ø x H26 mm (installation parts not included)

**Specifications**

BPF (Standard)*	FWHM Cavities	Insertion Loss
	1 +- 0,2 nm	1
	3 +- 0.3 nm	1
	4 +- 0.5 nm	2
		<= 1.5 dB
		<= 1.0 dB
		<= 1.0 dB

Tuning range                      20 nm, except a few types

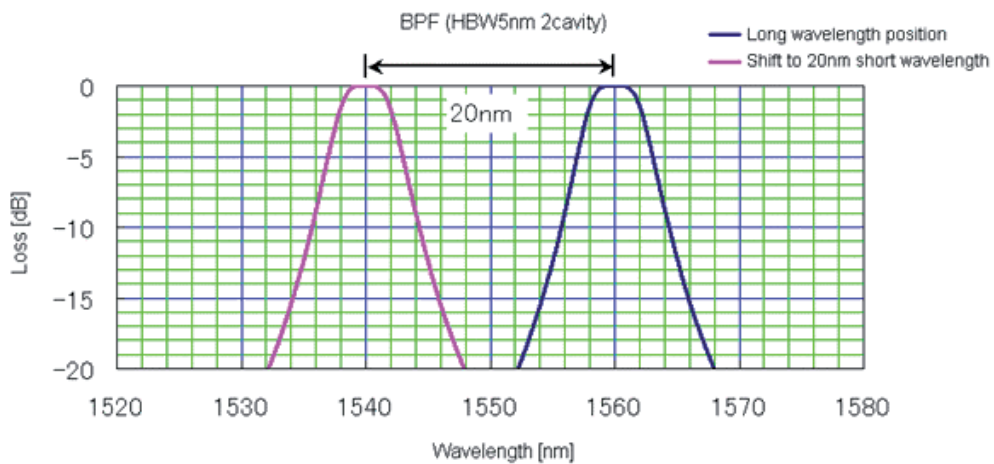
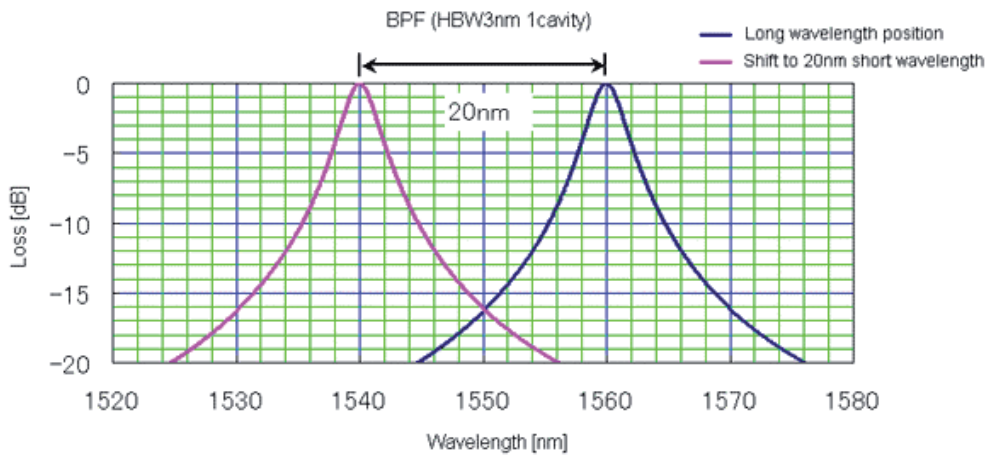
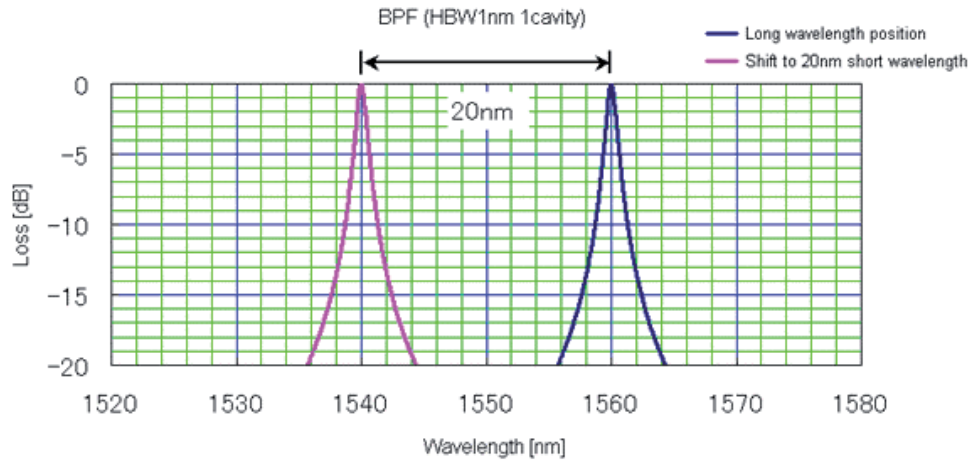
Specifications are for SFM, other characteristics, please contact us with your special inquiry. We also provide LPF, SPF etc.. Specifications are subject to change without notice.

**Filters wavelengths**

1205 – 1675 nm are available,  
 360, 500, 850, 980, 1064 nm on request



**Information about filter specifications**





## Ordering Information for FCs FC-\*\*\*\*C-D-E

### 1. Wavelength

\*\*\*\* longest wavelength in the adjustable range – 1560 = wavelength 1540 – 1560

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### 2. Filter Type (C)

B = Band Pass filter  
L = Long Pass filter  
S = Short Pass filter

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### 3. Cavities (D)

1 = 1 cavity  
2 = 2 cavities  
3 = 3 cavities

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### 4. FWHM (E)

0,6 nm	1 cavity	-> FWHM: more than 0.6 nm
0.8 nm	2 cavities	-> FWHM: more than 0.8 nm
1.0 nm	3 cavities	-> FWHM: more than 13 nm
2.0 nm		
3.0 nm		
5.0 nm		
13 nm		
15 nm		

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### Example:

**FC-1550B-1-1** = Filter cassette with wavelength range 1530 – 1550 nm, Band Pass Filter (C), 1 cavity (D), FWHM 1 nm (E)



**Request for Quotation by Fax to +49 (0) 20 41 - 5 67 12 27**

Sender

Name\* \_\_\_\_\_

Company\* \_\_\_\_\_

Address\* \_\_\_\_\_

Tel, Fax No\* \_\_\_\_\_

E-Mail\* \_\_\_\_\_

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Products	Quantity	Type
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TFM		
WTFM		

FC		
FC		
FC		
FC		
FC		
FC		

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Message to TECOS:

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