

# 1900~1970nm PM Tap Isolator Hybrid

#### **FEATURES**

## **APPLICATIONS**

- Low Excess Loss
- Various Splitting Ratio
- Wide Passband
- High Stability and Reliability
- Epoxy Free Optical Path
- Optical Amplifier
- Optical Networks
- **Power Monitoring**
- Fiber Sensor
- Lab



### **SPECIFICATIONS**

|                            | Unit                                                                                                                                      | Single Stage                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Dual Stage                 |  |  |  |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--|--|--|
| Working Wavelength         |                                                                                                                                           | 1900±10, 1930±20, 1950±20, 1970±20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |  |  |  |
|                            | %                                                                                                                                         | 0.1:99.9, 1:99, 2:98, 5:95, 10:90, 20:80, 30:70, 40:60, 50:50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                            |  |  |  |
|                            | -                                                                                                                                         | 0.1%, 1+/-0.6%, 2+/-0.8%, 5+/-1.0%, 10%, 20%, 30%, 40%, 50%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                            |  |  |  |
| Max.                       | dB                                                                                                                                        | 1.6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 2.0                        |  |  |  |
| (23°C)                     | dB                                                                                                                                        | 10 25                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                            |  |  |  |
| tio                        | dB                                                                                                                                        | ≥18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |  |  |  |
| S Type                     | -                                                                                                                                         | Tap Input Light before Isolator,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Can only work in Slow Axis |  |  |  |
| e F Type                   | -                                                                                                                                         | Tap Input Light before Isolator, work in Slow & Fast Axis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                            |  |  |  |
| В Туре                     | -                                                                                                                                         | Tap Input Light after Isolator, Can only work in slow axis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                            |  |  |  |
| Optical Return Loss        |                                                                                                                                           | ≥50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |  |  |  |
| Tap Port                   | -                                                                                                                                         | Same fiber, Corr. SM Fiber or 105/125um MM Fiber                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |  |  |  |
| Th Dot                     | -                                                                                                                                         | PM1550 Fiber or PM1950 Fiber (V)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                            |  |  |  |
| Inru Port                  |                                                                                                                                           | 10/130um PMDC Fiber (O) or 25/250um PMDC Fiber (R)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |  |  |  |
| Fiber Tensile Load         |                                                                                                                                           | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |  |  |  |
| Max. Optical Power (CW)    |                                                                                                                                           | 300                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                            |  |  |  |
| Operating Temperature      |                                                                                                                                           | 0~50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            |  |  |  |
| Storage Temperature        |                                                                                                                                           | -40~85                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                            |  |  |  |
| Stainless Steel Tube (SST) | mm                                                                                                                                        | (Ø)5.5x35                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                            |  |  |  |
| Metal Box                  | mm                                                                                                                                        | (L)120x(W)12x(H)10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                            |  |  |  |
|                            | Max.  (23°C)  tio  S Type  F Type  B Type  n Loss  Tap Port  Thru Port  Load  Power (CW)  mperature  perature  Stainless Steel Tube (SST) | Nax.   Aba   Aba   Nax.   Aba   Nax.   Aba   Nax.   Aba   Nax.   Aba   Aba | Pelength                   |  |  |  |

Note: 1. Specifications are for device without connectors; Specifications may change without notice.

2. To add connectors, IL is 0.3dB higher, RL is 5dB lower, ER is 2dB Lower, Connector key is aligned to slow axis.

3.Devices for higher optical power or with other type fiber or consigned fiber are also available; Devices can only work in the core of Double Cladding (DC) Fiber, Cladding Power must be stripped before connecting the device.

## **ORDERING INFORMATION (PN)**

| FPTI-NNNN   | - C            | С        | NN                | С                         | -( <b>C</b> )        | С                           | С             | NN                    | -CC/CCC                 |
|-------------|----------------|----------|-------------------|---------------------------|----------------------|-----------------------------|---------------|-----------------------|-------------------------|
| Wavelength  | Stage          | Туре     | Split Ratio       | Tap Port Fiber            | Package              | Fiber Type                  | Fiber Sleeve  | Fiber Length          | Connector Type          |
| 1900-1900nm | S=Single Stage | S=S Type | 01=1/99           | Y= Same Fiber             | M=Metal Box          | 2=PM1550Fiber               | B= Bare Fiber | 05=0.5m               | N=Without Connector     |
| 1930-1930nm | D=Dual Stage   | F=F Type | 10 <b>-</b> 10/90 | S=Corr. SM Fiber          | <i>Blank</i> for SST | V=PM1950 Fiber              | L= Loose Tube | <mark>10=</mark> 1.0m | FC/APC=FC/APC Connector |
| 1950=1950nm | H=H Stage      | B=B Type | <b>30-</b> 30/70  | <b>A=</b> 105/125um Fiber |                      | <b>0-</b> 10/130 PMDC Fiber | 2= 2mm Cable  | 15=1.5m               | LC/PC=LC/PC Connector   |
| 1970=1970nm |                |          | <b>50=</b> 50/50  |                           |                      | R=25/250 PMDC Fiber         | 3= 3mm Cable  | <mark>20=</mark> 2.0m | SC/UPC=SC/UPC Connector |





