Feasa manufactures a series of couplers, which are optimised for use in fiber interferometers. The couplers have a highly reflective end on one or more output ports and can be configured as 1x2 or 2x2. They are available in a range of fiber types including bend insensitive high NA fiber.

In the interferometer light is launched into input port 1 of the coupler. The light is split between the sensing arm and the reference arm on the output side of the coupler. The highly reflective terminations reflect the light from both arms, back into the coupler, where it recombines to create interference fringes. These fringes can then be monitored at the second coupler input port.

**APPLICATIONS**
- Hydrophones
- Acoustic Emission Sensor
- Strain Gauges
- Temperature Sensors
- Sonar

**FEATURES**
- Extremely low loss
- Small Package Size
- High reflectivity
- Environmentally stable

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Typical Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insertion Loss</td>
<td>&lt; 3.4db (50%)</td>
</tr>
<tr>
<td>End Reflectivity</td>
<td>&gt; 90%</td>
</tr>
<tr>
<td>Operating Wavelengths</td>
<td>850nm, 1300nm, 1550nm</td>
</tr>
<tr>
<td>Bend Insensitive Fibers</td>
<td>SMF28 High NA</td>
</tr>
<tr>
<td>Coupling Ratios</td>
<td>1% to 50%</td>
</tr>
</tbody>
</table>

**ORDERING INFORMATION**

2X2REFL- A –B – CC –DD – EE - F

- Fiber (A)
  - 1 = SMF28
  - 2 = High NA 125um
  - 3 = High NA 80um

- Number of Reflective Ends (B)
  - 1 = One
  - 2 = Two

- Operating Wavelength (CC)
  - 82 = 820nm
  - 13 = 1300nm
  - 15 = 1550
  - ZZ = Custom

- Coupling Ratio (DD)
  - 1% to 50%

- Configuration (EE)
  - 12 = 1 X 2
  - 22 = 2 X 2

- Package (F)
  - S = Standard 63mm
  - M = Minature 45mm
  - U = Ultra Minature 35mm