

## Diplexer for the 0 - 500 MHz and 800 - 2500 MHz Ranges

### DESCRIPTION

- Diplexer for combining or splitting the two ranges 0 - 500 MHz and 800 - 2500 MHz.
- Excellent wide-band coverage – usable for a lot of applications.
- Extremely small dimensions.
- Quick installation using dual-adhesive pad (provided).
- FME-connections on all terminals.



### SPECIFICATIONS

Electrical	
Model	DIPX 500/800-2.5G
Frequency	Ant-low port : 0 - 500 MHz Ant-high port : 800 - 2500 MHz
Max. Input Power	Ant-low port: 20 W Ant-high port: 15 W
Insertion Loss	Ant-low port: 0 - 500 MHz : < 0.5 dB typ. < 0.3 dB Ant-high port: 800 - 2000 MHz: < 0.9 dB typ. < 0.4 dB 2000 - 2500 MHz: < 1.0 dB typ. < 0.7 dB
Impedance	50 $\Omega$
Isolation	Low to high port: 0 - 500 MHz: > 45 dB typ. > 50 dB 800 - 2500 MHz: > 40 dB typ. > 50 dB
VSWR	Ant: < 1.5 (0 - 500 MHz, 800 - 2000 MHz) and: < 2.0 (2000 - 2500 MHz) with the others ports terminated with 50 $\Omega$ . Low: < 1.5 (0 - 500 MHz) with the others ports terminated with 50 $\Omega$ . High: < 2.0 (2000 - 2500 MHz) with the others ports terminated with 50 $\Omega$ .

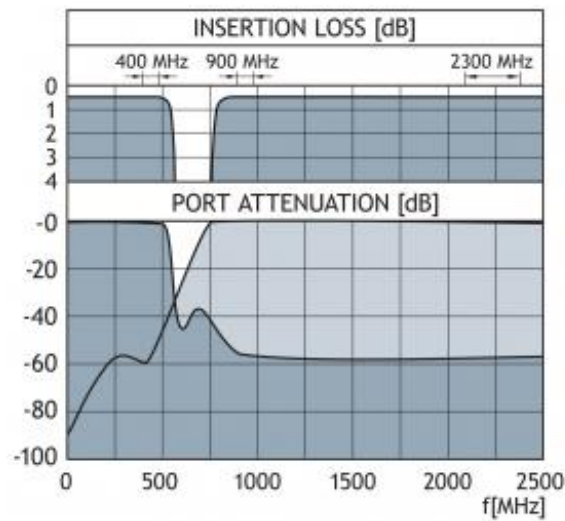
Mechanical	
Connection(s)	Low : FME High : FME Antenna: FME
Dimensions	50 x 21 x 50 mm / 1.96 x 0.82 x 1.96 in.
Weight	Approx. 0.06 kg / 0.13 lb.
Mounting	Fitted with dual-adhesive pad at the bottom of box

Environmental	
Operating Temperature Range	-30°C to +60°C

### ORDERING

Type	Product No.
DIPX 500/800-2.5G	200000790

TYPICAL RESPONSE CURVES



The DIPX 500/800-2.5G makes it possible to use only one antenna for the operation of two transceivers (one in each range). See the figure below. The antenna must be a dual-frequency antenna, i.e. it must be resonant on the actual frequencies in the two bands. The transceivers may be used independently and will have no degrading influence on each other. Typically, the diplexer is installed next to the transceivers and only one cable is used between the diplexer and the antenna. The diplexer is suitable both for base station and mobile use.

The main tasks of the diplexer are to protect the individual receiver input from being destroyed by the transceiver in the contrary band and to ensure a low-loss path between the transceiver and the antenna which is not loaded by the other branch.

The diplexer can be operated together with any set of transceivers operating within the 0 - 500 MHz and 800 - 2500 MHz frequency bands.

Dual-frequency antennas are available for both mobile and base station applications.

