

## WiFi 2.4 + 5 GHz injector 2501.17.0097

### Description

This diplexer allows efficient combining of WiFi services at the standard WiFi standards of 802.11 (a), (b), (g) and (n) at 2.4 GHz and 5.8 GHz with security and/or cellular networks or DAS working in the range from 80 to 2170 MHz. This can provide the benefit of the same controlled coverage of the higher frequency services with the DAS.

Tapped holes are provided for simple mounting to a surface or cable tray.

This model has been designed and tested to meet the European Rail Standards:  
EN50121

EN50155: 2001, EN61373: 1999

EN60068-2-1: 1995

EN60068-2-2: 1994

EN60068-2-30: 2000



### Technical Data

#### Electrical Data

	Band 1	Band 2	Band 3
Frequency (MHz)	2.4 - 2.5 GHz	4.9 - 5.85 GHz	0.08 - 2.17 GHz
Insertion loss (dB)	1 dB	0.5 dB	0.7 dB
Return loss (dB)	15 dB	15 dB	17 dB
Band 1 Band 2			35 42 dB
Max. composite power	10 W	10 W	50 W
Intermodulation distortion	0 dBc	0 dBc	-161 dBc
@ 2 x carrier power	0 dBm	0 dBm	43 dBm
Port Designation	J1	J1	J2
Connector Type	N	N	N
Gender	jack (female)	jack (female)	jack (female)

#### Ports

Port designation	J3
Connector	N jack (female)
Impedance	50 Ω

Typical loss J1-J3: 0.5 dB (2.4 - 2.5 GHz) and 0.25 dB (4.9 - 5.85 GHz)

Typical loss J2-J3: 0.2 dB

DC path J1-J3: none

DC path J2-J3: < 2.5 A

#### Mechanical Data

Width	84.1 mm
Height	32.4 mm
Depth	82.1 mm
Weight	0.365 kg

#### Environmental Data

Environmental conditions	indoor
Operation temperature	0 °C to 55 °C
Storage temperature	0 °C to 55 °C
Transport temperature	0 °C to 55 °C
IP rating	IP64
2011/65/EU (RoHS - including 2015/863 and 2017/2102)	compliant
1907/2006/EC (REACH)	compliant

#### Material Data

Housing Material	Aluminium
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Surface treatment

Passivated

### Related Documents

Outline drawing  
3D-model (Step)

DOU-00286697  
DOC-0000686223