

## Triplexer for proD4

*The use of proFIL™ family of antenna combiners and splitters makes the design of communication system trouble free and easy. It helps in reducing the interference between communication system.*



proFIL™ 1313 is a compact and high performance antenna splitter from 80 MHz up to 2.5 GHz WiFi frequency. It is designed to be used with proD4™ antenna.

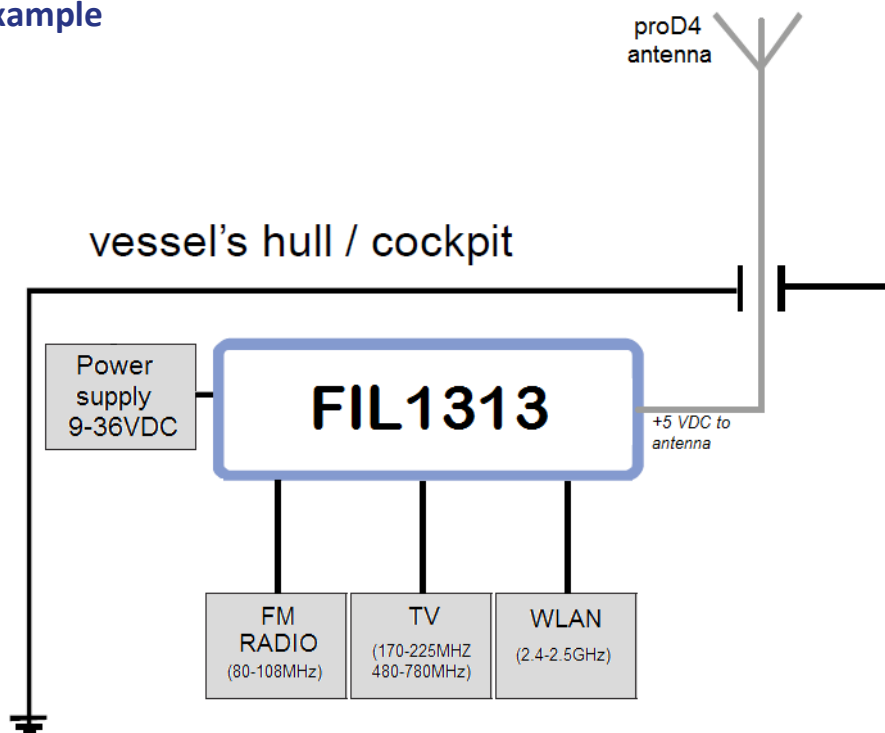
### Operation

Triplexer–type of filters enables simultaneous transmission and reception within the same port.

proFIL™ 1313 is a frequency division combiner and won't create any extra splitting losses except the normal insertion loss that can be compared to small length of an antenna cable. proFIL™ 1313 splits proD4™ signal from combo-antenna to FM radio (80 MHz – 108 MHz), TV (170 MHz – 225 MHz / 480 MHz – 780 MHz) and WLAN 2.4 GHz – 2.5 GHz.

proFIL™ 1313 triplexer has also power supply feature integrated for proD4™ high performance, low-noise FM-radio and TV antennas amplifiers.

### Connection example



## Triplexer for proD4

**Table 1 Electrical Specifications**

Electrical Specifications (TA=25°C)	proFIL 1313
Antenna Port	proD4™ combo-antenna port (white) Impedance: 50 Ω Power feed: +5 VDC (max.3W) Connector: BNC-female
Radio Ports	<p><b>FM1:</b> 80 MHz – 108 MHz Impedance: 75 Ω RL: &gt; 13 dB Insertion (splitting) loss: &lt; 1.5 dB Power: 0.1 W (Receive only) Connector: F-female</p> <p><b>TV:</b> 170 MHz – 225 MHz (VHF) 480 MHz – 780 MHz (UHF) Impedance: 75 Ω RL: &gt; 13 dB Insertion (splitting) loss: &lt; 1.5 dB Power: 0.1 W (receive only) Connector: F-female</p> <p><b>WLAN:</b> 2.4 GHz – 2.5 GHz Impedance: 50 Ω RL: &gt; 18 dB Insertion (splitting) loss: &lt; 1.5 dB Power: 0.1 W Connector: TNC-female</p>
Power Input	9-36VDC, galvanic isolated from antenna port Current consumption: 65 mA at 12V (in proD4 use)
Port Isolation (between outputs)	> 40 dB
Resistance to ground	Body grounded with coax shields, antenna port shield and radio port shields in common potential. Power supply isolated from the RF-circuitry, connectors and chassis.

**Table 2 Mechanical and Environmental properties**

Mechanical properties (TA=25°C)	proFIL 1313
Dimensions	height: 30mm width: 119mm depth: 110mm
Weight	about 350g
Material	Aluminium body
Ingress protection	none
Mounting	wall mounting flanges with M4 holes
Standards	All proFIL™ products are to the standard of IEC60945 to insure safe operation in the environment on relevant parts. Some of the criteria is operating temperature, storage temperature, humidity, vibration, electromagnetic compatibility.