

300-470MHz / 690-2700MHz DIPLEXER FILTER

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

HIGHLIGHTS

- Reduced co-site interference
- Reduced intermodulation
- Saved space
- Reduced installation cost and time



DESCRIPTION

proFIL5230 is a compact and high performance duplex type antenna combiner from 300MHz up to 3GHz. It is ideally used with proTAC5315 wideband LTE antenna to split it between 380MHz TETRA or 450MHz LTE modem and 4G LTE modem.

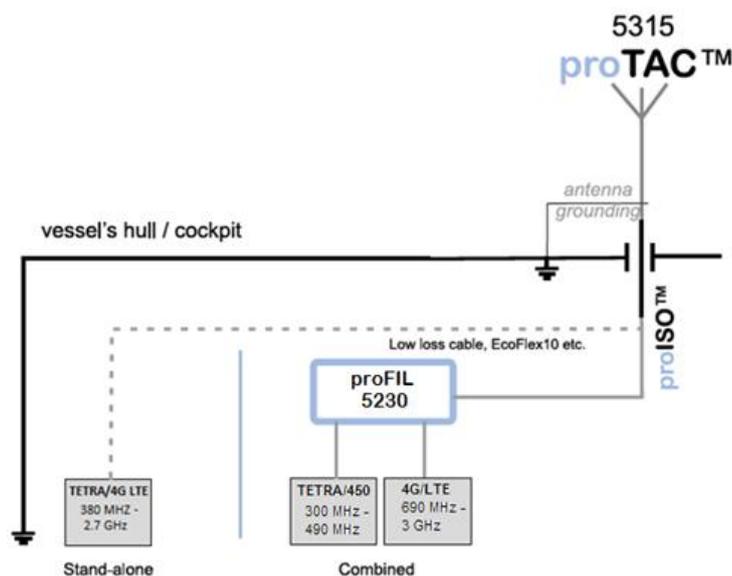
OPERATION

proFIL antenna combiners are completely passive with no wearing or serviceable parts, thus maximizing the reliability. They all feature high RF-isolation between radio ports and steep band pass characteristics towards antenna thus minimizing the risk for spurious transmissions.

Diplex type filters enable simultaneous transmission and reception within the same antenna port. They also enable simultaneous transmission and/or reception in adjacent radio ports if specified for transmitters.

As they are frequency division combiners, they don't create any extra splitting losses except the normal insertion loss comparable to small length of an antenna cable.

CONNECTION EXAMPLE

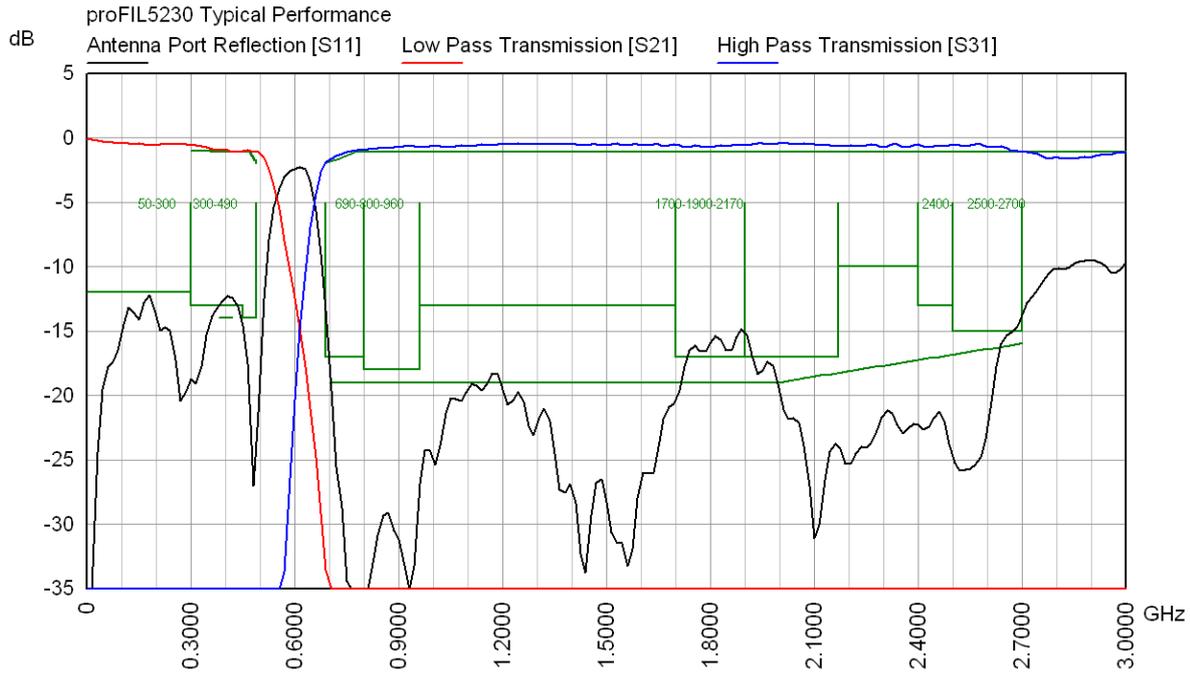


TECHNICAL SPECIFICATIONS

Electrical Specifications (TA=25°C)	
Antenna port	300MHz-2.7GHz
Radio ports	LTE low: 300-490MHz Return loss: <-13...-18dB Insertion loss: <1dB LTE high: 690-2700MHz Return loss: <-15...-25dB Insertion loss: <1dB
Power handling	5W (max. simultaneous)
Port isolation (between outputs)	>30...40dB
Port impedance	50 Ohm
Connectors	N-female
Resistance to ground	Connector shield connected to case ground

Mechanical and Environmental properties (TA=25°C)	
Dimensions	Width: 148mm with mounting flanges Depth: 116mm including connectors Height: 34mm
Weight	390 g
Material	Aluminium body
Mounting	Wall mounting flanges with 4xM4 holes
Ingress protection	IP50
Operational environment continuous	-20° - +40° C
Environmental	Inside non condensing
Color	RAL5000
Order code	FIL5230
Standards	All proFIL™ products are built to the standard of IEC60945 to ensure safe operation in relevant environmental conditions. Some of the criteria include operating temperature, storage temperature, humidity, vibration, and electromagnetic compatibility.

TYPICAL PERFORMANCE



MOUNTING DIMENSIONS

