

# proD4™

## Multifrequency antenna for everyday communications

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proD4™ is an highly integrated multifrequency antenna that covers the most of communication frequencies and it performs! It is used in normal leisure boats and in professional work- and patrol boats as well.

### Overview

proD4™ – multi frequency antenna covers all everyday communication needs for leisure boat. It's leading design principle was to maximize signal to noise ratio and signal quality instead of reaching the maximum gain at the cost of quality.

proD4™ utilizes also the state of the art design rules that are normally not seen in consumer electronics. It is perfect for sailing boats and marine environments where signals are strongly reflected from the wave surface. In addition to FM, TV, WLAN and GPS it covers all GSM, 3G and LTE bands.

### Operation

It's operating frequencies are arranged into three groups (FM/TV/WLAN, GSM/4G/WLAN, GPS) each fed with separate cable to make its usage easier. It can be further coupled with special splitter that provides necessary operating power to the antenna (specially GPS and FM/ TV amplifier).

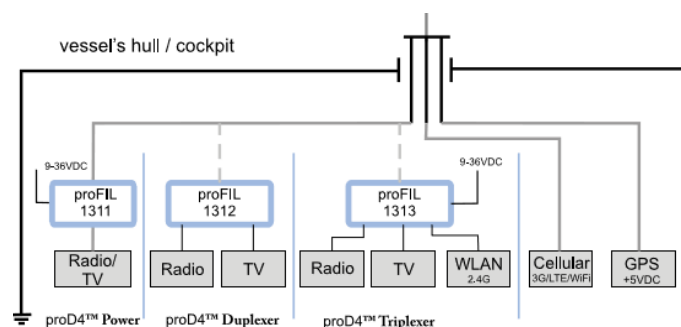
The TV antenna of proD4™ is amplified and filtered. Filtering is done separately for TV VHF and TV UHF bands in order to maximise its performance and avoid interference caused by AIS, VHF, 450MHz data radios and GSM radios. The used amplifier is a state of the art design closely integrated with the antenna element thus minimizing the required gain (too big gain amplifies interference and reduces signal quality). This way the overall signal quality is superior to the other antennas.

It does them all

- FM radio
- DAB (digital audio broadcast)
- DVB / DVB-T / DVB-T2
- PAL, NTSC, SECAM
- GSM800, GSM900, GSM1800, GSM1900, 3G800/2150, 4G/LTE
- WLAN2.4
- GPS/GLONASS/GALILEO

# TECHNICAL SPECIFICATIONS

## Connection example:



### Mechanical and Environmental properties (TA=25°C)

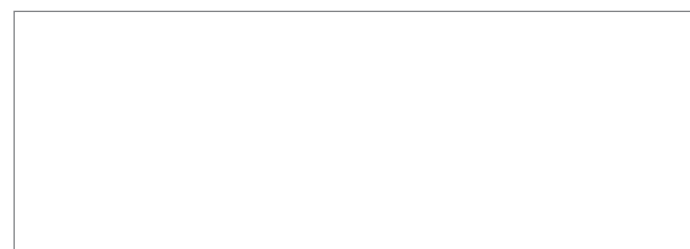
Dimensions	height: 160 mm diameter: 370 mm
Weight	2000 g
Material	Plastic body (ASA)
Mounting	Standard UNF1 -14inc (1"-14tpi) mount with inner thread optional mounting bushing R1 thread (1-1/4" -11tpi)
Ingress protection	IPx5
Operational environment continuous	20° - +30° C (short term -40° - +55°)

ORDER CODE	PROD401
ACCESSORIES	FIL1311 – proD4 Power Feeder FIL1312 – proD4 Duplexer FIL1313 – proD4 Triplexer BUSHING 2 - optional mounting bushing R1 thread (1-1/4" -11tpi) CABLEKIT 1 - 3x 7m low loss cables with connectors CABLEKIT 2 - 3x 10m low loss cables with connectors CABLEKIT 3 - 3x 15m low loss cables with connectors

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, electro-magnetical compatibility.
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### Electrical Specifications (TA=25°C)

Antenna properties	
Frequency/ relative gain	FM Radio: 80-108MHz / > 8dBi TV(VHF): 170-240MHz / > 14dBi TV(UHF): 480-800MHz / > 18dBi GSM:800-960MHz / > 2dBi GSM:1700-2150MHz / > 2dBi WLAN: 2.4GHz / >2dBi GPS: 1575-1610MHz / 28dBi
Power supply	Active GPS antenna +5VDC/25mA FM/TV antenna amplifier +5VDC/<300mA
Connectors	FM/TV/WLAN: BNC – female GSM/LTE: TNC – female GPS: TNC-male



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