

A multi purpose shark fin antenna for UHF, GNSS, GPS, 2G/3G/4G and dual WiFi 2.4 + 5.0 GHz

DESCRIPTION

- > In-built UHF antenna available.
- > In-built 4G antenna (698 - 960 MHz and 1710 - 2700 MHz).
- > GNSS antenna for GPS L1, Glonass, Beidou and Galileo.
- > Dual WiFi 2.4 and 5.0 GHz.
- > Supports external whip.
- > No diplexer needed.
- > The ProFin provides antennas for multiple technologies.
- > The ProFin covers UHF, GNSS, GPS L1, 2G/3G/4G cellular bands, dual WiFi 2.4 and 5.0 GHz and an optional whip.
- > The ProFin can support antenna whip in the range 66 - 6000 MHz.
- > All ProFin configurations are prepared for external whip.
- > Easily removable whip for car wash.
- > Full hemispherical coverage for the GNSS and GPS.
- > Built-in high gain, low noise amplifier.
- > Right-Hand Circular Polarization (RHCP).
- > 3 - 15 VDC for GPS supply.
- > DC supply via GPS RF-connector.



Shown with optional external whip.



SPECIFICATIONS

Electrical	
Model	ProFin
Frequency	UHF: 380-470 MHz (in three models) WiFi: 2300-2500 MHz, 5000-6000 MHz 4G 698-960 MHz, 1710-2700 MHz
Antenna Type	Mobile Shark Fin Style Antenna
Polarisation	Vertical
Pattern Type	Omnidirectional
Impedance	50 Ω
SWR	< 2.0:1 (< 2.5:1 for 698 -960 MHz)
Maximum Input Power	25 W for built-in UHF and 4G antenna 100 W for whip
Gain (EIA RS-329-1)	Varies over frequency (see gain table and plots)

Mechanical	
Antenna Colour	Black (RAL 9005)
Connection(s)	SMA(m) (all antennas)
Materials	Reinforced PA, Zamak 5
Installation Torque	4 +/- 0.5 Nm
Colour	Black (RAL 9005)
Dimensions	Approx. 76 x 142.5 mm / 2.99 x 5.61"
Max. Roof Thickness	3 mm / 0.12 in.
Whip Connection	SMA-male
Weight	0.26 kg / 0.57 lb
Mounting	18.5 mm / 0.8" dia. hole Max roof curvature: 2.0 mm/0.08" (on 142 mm)

GNSS Antenna	
Noise Figure (GNSS Amplifier)	1.6 dB (typ.)
Cross Polar Discrimination (GNSS)	> 10 dB (typ.)
Gain (GNSS Amplifier)	26 dB (typ.)
Selectivity (GNSS Amplifier)	> 25 dB down @ 0 - 1540 MHz > 27 dB down @ 1625 - 3000 MHz
SWR (GNSS Amplifier)	< 2.0:1
Frequency (GNSS)	1559 - 1609 MHz (GPS L1, Glonass, Beidou and Galileo)
Power Supply (GNSS)	3 - 15 VDC
Current Consumption (GNSS Amplifier)	Approx. 20 mA
Polarisation (GNSS)	RH Circular
Impedance (GNSS)	50 Ω

GPS Antenna	
Noise Figure (GPS Amplifier)	< 1.5 dB (typical 1.1 dB)
Gain (GPS Amplifier)	22 dB ± 2 dB
Frequency (GPS)	1575 MHz
Power Supply (GPS)	3 - 15 VDC
Current Consumption (GPS Amplifier)	< 12 mA
Impedance (GPS)	50 Ω

Environmental	
Operating Temperature Range	-50 °C to +75 °C

ORDERING

Type	Product No.	Description
ProFin G1	132000230	4G, WIFI,GNSS
ProFin G2	132000231	4G, WIFI,GNSS,GPS
ProFin G1-395	132000232	4G, WIFI,GNSS,UHF 380-410 MHz
ProFin G1-430	132000233	4G, WIFI,GNSS,UHF 410-450 MHz
ProFin G1-450	132000234	4G, WIFI,GNSS,UHF 430-470 MHz
ProFin G2-395	132000236	4G, WIFI,GNSS,GPS,UHF 380-410 MHz
ProFin G2-430	132000237	4G, WIFI,GNSS,GPS,UHF 410-450 MHz
ProFin G2-450	132000238	4G, WIFI,GNSS,GPS,UHF 430-470 MHz
MP-SS-S/FM whip	132000244	Stainless steel whip with shock spring.
MP-SS-S/150 whip	132000245	Stainless steel whip with shock spring. (adjustable by customer)
MP-B/450/405 MHz whip	132000247	Flexible whip (0 dB acc. to TIA-329.2-C)
MP-B/450/445 MHz whip	132000248	Flexible whip (0 dB acc. to TIA-329.2-C)
MP-SS/450-4/395 MHz whip	132000249	Stainless steel collinear whip (4 dB acc. to TIA-329.2-C)
MP-SS/450-4/425 MHz whip	132000250	Stainless steel collinear whip (4 dB acc. to TIA-329.2-C)
MP-SS/450-4/455 MHz whip	132000251	Stainless steel collinear whip (4 dB acc. to TIA-329.2-C)
MP-G-S/150/450/.../...whip	132000224	Flexible whip with shock spring (factory adjusted)
MP-G-S/450/FM/395 whip	132000256	Flexible whip with shock spring (factory adjusted)
5m ProFin Cable Kit	132000243	
1m SMA(f)-N(m)	130002409	
2m SMA(f)-N(m)	130002410	
3m SMA(f)-N(m)	130002411	
4m SMA(f)-N(m)	130002412	
5m SMA(f)-N(m)	130002413	
1m SMA(f)-BNC(m)	130002414	
2m SMA(f)-BNC(m)	130002415	
3m SMA(f)-BNC(m)	130002416	
4m SMA(f)-BNC(m)	130002417	
5m SMA(f)-BNC(m)	130002418	
1m SMA(f)-TNC(m)	130002419	
2m SMA(f)-TNC(m)	130002420	
3m SMA(f)-TNC(m)	130002421	
4m SMA(f)-TNC(m)	130002422	
5m SMA(f)-TNC(m)	130002423	
1m SMA(f)-SMA(m)	130002424	
2m SMA(f)-SMA(m)	130002425	
3m SMA(f)-SMA(m)	130002426	
4m SMA(f)-SMA(m)	130002427	
5m SMA(f)-SMA(m)	130002428	
SMA(f)-N(m)	130002429	
SMA(f)-BNC(m)	130002430	
SMA(f)-TNC(m)	130002431	
SMA(f)-SMB(m)	130002432	

