# promarine

# **WIDE-BAND ANTENNAS**

ALSO FOR 4G / 5G COMMUNICATIONS



**proTAC 5311** 

**proANT 5331** 

**proANT 5340** 

LEAVE THE SHORE BEHIND -STAY CONNECTED!







## proTAC 5311 - THE BEST 4G/5G CONNECTION

#### **STABLE CONNECTION**

Good for critical ERP and VPN systems

### **ROBUST ALL-WEATHER PROOF**

For harsh conditions at sea

### FREQUENCY RANGE 600 MHz - 6 GHz

Covers all 2G, 3G, 4G and 5G and WiFi frequencies worldwide

#### **UP TO 7dBi TOTAL NET GAIN - WITHOUT COMPROMISES**

Longer range than standard antennas > 35km

#### **UNIQUE RADIATING ELEMENT DESIGN**

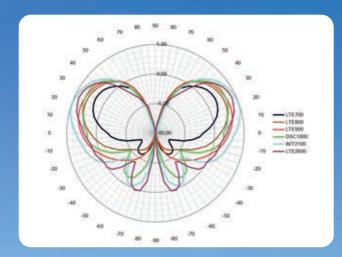
Made from solid copper, no lossy (resistive) elements

#### **PROVIDES NEARLY 100% RADIATION EFFICIENCY**

Huge cost savings in satellite based data

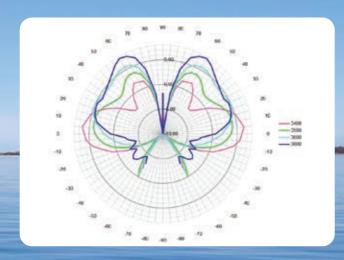
**FULLY OMNIDIRECTIONAL HORIZONTAL RADIATION PATTERN** 





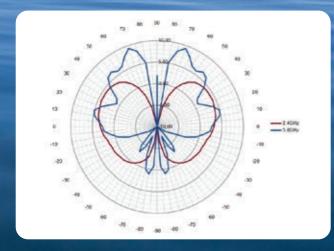
# IDEAL VERTICAL RADIATION PATTERN

AT TYPICAL LTE FREQUENCIES MAKING 4G/5G CONNECTION STABLE EVEN AT ROUGH SEAS



# VERTICAL RADIATION PATTERN

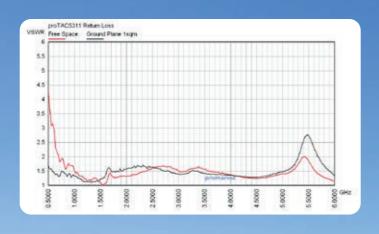
AT 3.5GHz 5G FREQUENCY BAND



# VERTICAL RADIATION PATTERN

AT 2.4GHz AND 5.8GHz WIFI BANDS

## proTAC 5311 - THE BEST 4G/5G CONNECTION





#### THE SMALLER THE VSWR

THE BETTER THE ANTENNA IS MATCHED TO THE MODEM AND THE MORE POWER IS DELIVERED TO THE ANTENNA

MIMO TECHNOLOGY USES MULTIPLE ANTENNAS TO ENHANCE WIRELESS LINK QUALITY AND RELIABILITY. IT ENABLES CONCURRENT TRANSMISSION AND RECEPTION OF MULTIPLE DATA SIGNALS OVER THE SAME RADIO CHANNEL, CAPITALIZING ON MULTIPATH PROPAGATION

MULTIPLE VERSIONS OF THE SAME SIGNAL

REDUCES ERROR RATE

STABILIZES THE LINK

IMPROVES PERFORMANCE

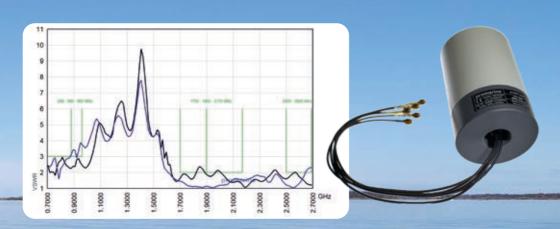
SPACE DIVERSITY UTILIZES ANTENNAS LOCATED IN DIFFERENT POSITIONS TO BENEFIT FROM VARIOUS RADIO PATHS

# proANT 5340 - ALL-IN-ONE SOLUTION

COST EFFECTIVE, ALL-IN-ONE SOLUTION FOR ONE 4G ROUTER

2 CROSS-POLARIZED LTE/4G ANTENNAS, 2 DUAL BAND WIFI ANTENNAS (2.4GHz / 5GHz) AND AN ACTIVE GNSS ANTENNA

TAKING ADVANTAGE OF THE REFLECTED SIGNALS AROUND US



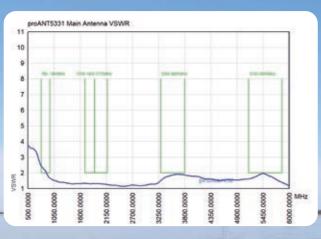
Model:	proANT 5340	Mounting:		
		BSP1"-11TPI internal thread antenna mount		
Type:	MIMO antenna	Environmental:	indoors, outdoor	
	omnidirectional		case IP67 shock proof	
Antenna modules		Frequency	Polarization	
LTE1 antenna		698MHz - 960MHz	Vertical polarization	
		1.7GHz - 2.7GHz		
LTE2 antenna		698MHz - 960MHz	Horizontal polarization	
		1.7GHz - 2.7GHz		
WiFi1		2.4GHz - 2.5GHz	Vertical polarization	
		5.15GHz - 5.85GHz		
WiFi2		2.4GHz - 2.5GHz	Vertical polarization	
		5.15GHz - 5.85GHz		
GNSS antenna (+5VDC)		1559-1610MHz	Linear horizontal	
Material:		Cables:		
ASA plastic radome, ABS base		RG174 cables with SMA-male connectors		
Antenna gain:		Size (h*I*w):		
1-5dBi		Height 148mm, width 93mm		
		Weight 600g		

# **proANT 5331 - HIGH PERFORMANCE MIMO**

#### HIGH PERFORMANCE MIMO ANTENNA FAMILY

# MAIN 4G/5G ANTENNA IS BASED ON THE SAME DESIGN AS OUR LEADING MODEL proTAC5311

UP TO 5 ANTENNAS IN 1 (LTE / WIFI / GNSS)





Model:	proANT 5331*			
	(check order code for each variant from separate list)			
Type:	MIMO antenna	Environmental:	Indoors, outdoors	
	omnidirectional		Case IP56 shock proof	
Up to 5 antenna options		Frequency	Polarization	
LTE Main antenna		790-6000MHz	Vertical polarization	
LTE AUX antenna		824-2170MHz	Horizontal polarization	
WiFi Main antenna		2400/5800MHz	Cross-polarized	
or		or	WiFi antennas	
LTE AUX antenna		824-2170MHz		
WiFi AUX antenna		2400/5800MHz	Or Horizontal polarization	
or		or	LTE AUX antennas	
LTE AUX antenna		824-2170MHz	LIE AOX antennas	
GNSS antenna(+5VDC)		1558-1610MHz	Circular polarization	
Material:		Mounting:		
Plastic cover (ASA)		BSP1"-11TPI internal thread antenna mount		
Stainless steel mounting plate				
Primary antenna:		Size (h*l*w):		
Vertical polarization, omnidirectional		155x140x105mm without mounting thread		
Antenna gain 0-5dBi		Height with BSP1"-11TPI mounting thread +42mm		

## **PROBLEM 2016** PROBLEM PROBLEM

ORDER CODE	ANTS331A	ANTS331AW	ANT5331A1	ANT5331A1W	
ANTENNAS	4G Main 790-6000MHz	4G Main 790-6000MHz	4G Main 790-6000MHz	46 Main 790-6000MHz	
	4G Aux 824-2170MHz	4G Aux 824-2170MHz	4G Aux 824-2170MHz	4G Aux 824-2170MHz	
	WiFi 2.4/5.8GHz	WiFi 2.4/5.8GHz			
	WiFi 2.4/5.8GHz	WiFi 2.4/5.8GHz			
	GNSS 1558-1610MHz	GNSS 1558-1610MHz			
CONNECTORS	5 x SMA-female RG316 ~30cm pigtails		2 x SMA-female RG316 ~30cm pigtails		
COLOR	Blue / black bottom	White / black bottom	Blue / black bottom	White / black bottom	
MOUNTING	BSP1*-11TPl inner thread				
ORDER CODE	ANTS331A2	ANT5331A2W	ANT5331A3	ANT5331A3W	
ANTENNAS	4G Main 790-6000MHz	4G Main 790-6000MHz	4G Main 790-6000MHz	4G Main 790-6000MHz	
	4G Aux 824-2170MHz	4G Aux 824-2170MHz	4G Aux 824-2170MHz	4G Aux 824-2170MHz	
	WiFi 2.4/5.8GHz	WiFi 2.4/5.8GHz	GNSS 1558-1610MHz	GNSS 1558-1610MHz	
	WiFi 2.4/5.8GHz	WiFi 2.4/5.8GHz		) Child - Startondino	
CONNECTORS	4 x SMA-female RG316 -30cm pigtails		3 x SMA-female RG316 ~30cm pigtails		
COLOR	Blue / black bottom	White / black bottom	Blue / black bottom	White / black bottom	
MOUNTING	BSP1"-11TPl inner thread				
ORDER CODE	ANT5331A4	ANT5331A4W			
ANTENNAS	46 Main 790-6000MHz	4G Main 790-6000MHz			
	4G Aux 824-2170MHz	4G Aux 824-2170MHz			
	4G Aux 824-2170MHz	4G Aux 824-2170MHz			
	4G Aux 824-2170MHz	4G Aux 824-2170MHz			
CONNECTORS	4 x SMA-female RG316 30cm pigtails				
COLOR	Blue / black bottom	White / black bottom			
MOUNTING	8SP1"-11T	Pl inner thread		-	

## **proANT5331 OPTIONS WITH N-FEMALE CONNECTORS**

ORDER CODE	ANT5331B1	ANT5331B1W			
ANTENNAS	4G Main 790-6000MHz	4G Main 790-6000MHz			
CELLA CHICAGO AND CO.	4G Aux 824-2170MHz	4G Aux 824-2170MHz			
CONNECTORS	2 x N-female				
COLOR	Blue / black bottom	White / black bottom			
MOUNTING	BSP1"-11TPI inner thread				



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# **MOUNTING OPTIONS**









HORIZONTAL / VERTICAL POLE

**DECK MOUNT** 



ACCANT 1001
MOUNT ADAPTOR



ACCANT 1002 BSP1" -11 TPI to 1" -14TPI MOUNT ADAPTOR



ACCANT1003 HORIZONTAL / VERTICAL POLE OR WALL MOUNT



ACCANT1012 HORIZONTAL **proTAC** ANTENNA MOUNT



## **MADE IN FINLAND**

Promarine Ltd sales@promarine.fi >> promarine.fi



We reserve the right to make changes.