

# B&G

## Broadband 4G™ Radar

Reinventing radar

SVB  
B&G



[www.bandg.com](http://www.bandg.com)

# Reinventing Radar

B&G has set a new standard of dome radar for yachtsmen, first with the award-winning BR24, and more recently with the Broadband 3G™ Radar. The latest innovation from B&G exceeds even our high standards. B&G now offers two Broadband Radar choices; the outstanding Broadband 3G™ Radar and the brand-new, truly exceptional Broadband 4G™ Radar.

## Sharpen Your View

Forget everything you thought you knew about radar, the Broadband 4G™ Radar reinvents the standard, transforming the way you'll navigate for good. Beam Sharpening, Target Separation Control, Dual Range Radar and High Speed Mode. No other radar comes close. Now you can monitor a buoy 200 feet away and keep track of coastal projections at 32nm all from one single dome at the same time for the ultimate in navigational safety.

## Sailing Specific Navigation

Compatible with our 8- and 12-inch Zeus chart plotters, a Broadband 4G™ Radar is the perfect complement to any sailing specific navigation system, enabling sailors to navigate anchorages and marinas at night more precisely and with increased confidence. Zeus features include weather data overlay, layline tracking, wind history plotting and much more.



View razor-sharp, easy to interpret radar images.

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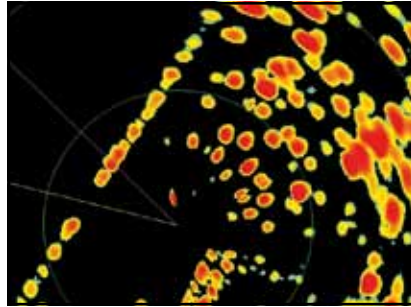
# Broadband 4G™ Radar

## High-res, near and far...

### + NEW Beam Sharpening

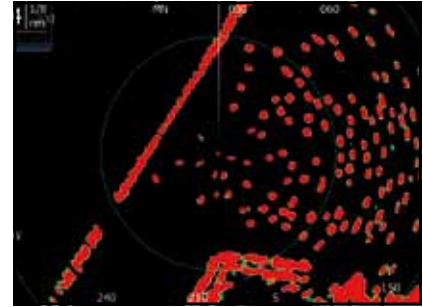
Broadband 4G™ Radar is the only dome radar in the world to employ beam sharpening, which allows you to control the level of target separation, so you can see the sharpest images possible when you need them most.

Typical 4kw Pulse Radar



Inferior separation of docks, boats and moored vessels.

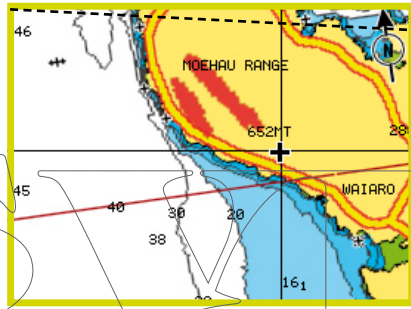
4G



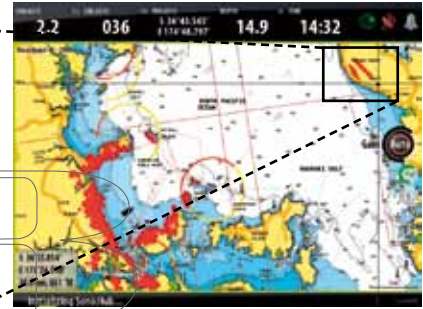
Superior short-range target discrimination with target detection set to high (~2.6°) clearly shows docks, boats and moored vessels.

### + NEW More Range

50% more true range than Broadband 3G™ Radar with 18 range scales up to 36nm. Now you can see crystal clear targets up to 32nm away and inside strong storm cells more than 17nm away.



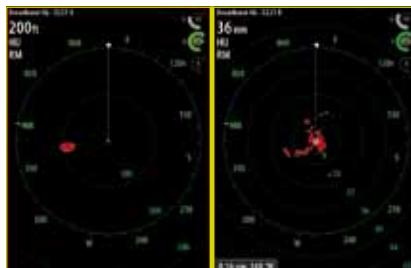
Coastal projection clearly seen zoomed in over 30nm away with Broadband 4G™ Radar.



4G sees targets at up to 30nm away with ease, as illustrated here.

### + NEW Dual Range

Capable of displaying Dual Range radar combination when combined with Zeus. Monitor targets from 200 feet to 32nm from a single dome.



Simultaneous Dual Range\* operation allows a working range of 200 feet to 36nm, all from the same dome at the same time. No other dome radar in the world can do this.

+ **NEW High Speed Mode** - Select 48RPM for almost instant updating at less than 1nm.

+ **Unrivalled Short Range** - Outstanding performance where it matters most, within 200ft.

+ **MARPA Target Tracking** - Track up to 10 targets as standard or 20 in Dual Range mode.

+ **Dual Guard Zones** - Protect yourself from more angles.

+ **Automatic Clarity** - Proven auto-tuning Harbour and Offshore modes.

+ **Extremely Low Emissions** - Emits less radiation than a mobile phone allowing it to be mounted anywhere.

+ **InstantOn™** - Produces immediate and accurate on-screen images.

+ **Low Power Consumption** - Ideal for sailing boats of any size.

+ **Quick Installation** - No reason to open the dome, no tune or zero mile adjustment, and no radar-licensed technician required.

General	
Compliance	FCC/IC/R&TTE FCC ID: RAY3G4G IC ID: 4697A-3G4G Human Exposure General Public Safety Limit - touch dome anywhere
Environmental	IEC60945: 2002 Operating Temperature: -25° to +55°C Relative humidity: +35°C, 95% RH Waterproof: IPX6
Relative wind velocity	51 m/sec (100 Knots) max
Power consumption	Operating: 20W (Typ.) @ 13.8VDC 21W in Dual Range Mode Standby: 2.9W (Typ.) @ 13.8VDC
DC input (at end of radar cable)	9V to 31.2Vdc (12/24 Volt systems). Reverse polarity protection Minimum start-up voltage 10.8Vdc
Transmitter Source (pre-heating time)	No magnetron – Instant On™
Outside dimensions	Height 280mm (11.02") x Diameter 488mm (19.28")
Weight (no cable)	7.4 kg (16.3 lbs.)
Radar and Antenna Parameters	
Radar Ranges	50m (200ft) to 66km (36nm) with 18 range settings (nm/sm/km)
Rotation	24/36/48rpm +/- 10%; Mode Dependent
Transmitter frequency	X-band - 9.3 to 9.4Ghz
Transmitter source (warm-up time)	No Magnetron - all solid state. Instant On™

Radar and Antenna Parameters contd.	
Plane of polarization	Horizontal Polarization
Transmitter peak power output (at antenna port)	165mW (nominal - at antenna port)
Main Bang Dead Zone & Tuning	None (not a pulse radar)
Sea and Rain Clutter	3-5 times less than a pulse radar
Sweep Repetition Frequency	200Hz - 540Hz (mode dependant)
Sweep Time	1.3ms +/- 10%
Sweep Bandwidth	75MHz max
Horizontal Beam width (Tx and Rx antenna)	5.2° +/- 10% (-3dB width)
Effective Beam width with target separation control	Adjustable between 2.6° and 5.2°
Vertical Beam width (Tx and Rx antenna)	25° +/- 20% (-3dB width)
Side lobe level (Tx and Rx antenna)	Below -18dB (within ±10°); Below -24dB (outside ±10°)
Noise figure	Less than 6dB
Coms/Cabling/Mounting	
Com Protocol	High Speed Ethernet (100 Base-T)
Heading	NMEA2000/Simnet (with RI-10 interface box - included)
Inter Connecting cable length	20m (32.8')
Maximum Inter Connecting cable length	30m (98.4') - available as an option
Bolts (4)	M8x30 - 304 stainless steel
Footprint	W233.0mm (9.17") (port to starboard) x L141.5mm (5.57")

\*Specifications subject to change without notice

