

B&G

Broadband 4G™ Radar

Reinventing radar



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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 32 nautical miles 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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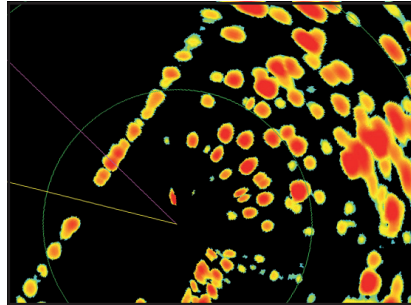
Broadband 4G™ Radar

High-res, near and far...

+ NEW Beam Sharpening

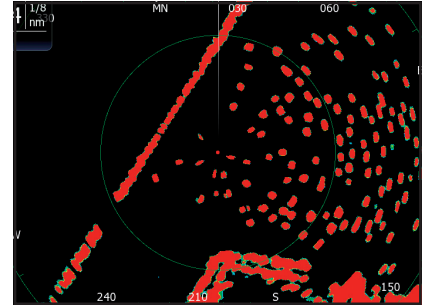
Broadband 4G Radar is the only dome radar in the world to employ Beam Sharpening, which allows you to control the level of target separation, so you can see the sharpest images possible when you need them most.

4 kW Pulse Radar



Inferior separation of docks, boats and moored vessels.

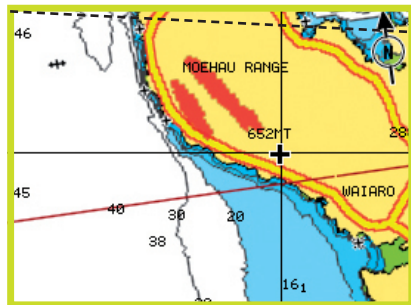
Broadband 4G Radar



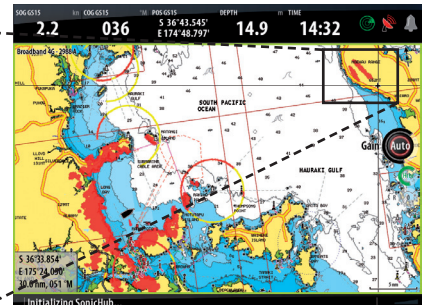
Superior short-range target discrimination with target detection set to high (~2.6°) clearly shows docks, boats and moored vessels.

+ NEW More Range

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



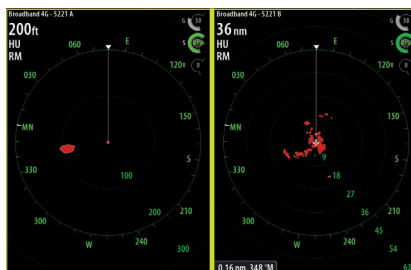
Coastal projection clearly seen zoomed-in 30+ nautical miles away with Broadband 4G Radar.



Broadband 4G Radar sees targets at up to 30 nautical miles away with ease, as illustrated here.

+ NEW Dual Range

Capable of displaying Dual Range radar combination when combined with a Z8 and Z12 system. Monitor targets from 200 feet to 32 nautical miles from a single dome.



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

+ **NEW High-Speed Mode** - Select 48 RPM for almost instant updating at under 1 nautical mile.

+ **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 Harbor and Offshore modes.

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

+ **InstantOn™ Viewing** - 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.

Broadband 4G Radar Specifications

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: -13° to +130°F/-25° to +55°C Relative humidity: +95°F/+35°C, 95% RH Waterproof: IPX6
Relative Wind Velocity	51 m/sec (100 knots max)
Power Consumption	Operating: 20W (Typ.) @ 13.8 vDC 21W in Dual Range Mode Standby: 2.9W (Typ.) @ 13.8 vDC
DC Input (at end of radar cable)	9 to 31.2 vDC (12/24 Volt systems). Reverse polarity protection Minimum start-up voltage 10.8 vDC
Transmitter Source (pre-heating time)	No magnetron - Instant On™ viewing
Outside Dimensions	Height: 11.02 in/280 mm Diameter: 19.28 in/488 mm
Weight (no cable)	16.3 lb/7.4 kg
Radar and Antenna Parameters	
Radar Ranges	200 ft/50 m to 36 nm/66 km with 18 range settings (nm/sm/km)
Rotation	24/36/48 RPM +/- 10%; (mode dependent)
Transmitter Frequency	X-band - 9.3 to 9.4 GHz
Transmitter Source (warm-up time)	No Magnetron - all solid state InstantOn™ viewing

Radar and Antenna Parameters continued ...	
Plane of Polarization	Horizontal polarization
Transmitter Peak Power Output (at antenna port)	165 mW (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	200 - 540 Hz (mode dependant)
Sweep Time	1.3 ms +/- 10%
Sweep Bandwidth	75 MHz max
Horizontal Beam Width (Tx and Rx antenna)	5.2° +/- 10% (-3 dB width)
Effective Beam Width	Adjustable between 2.6° and 5.2° with target separation control
Vertical Beam Width (Tx and Rx antenna)	25° +/- 20% (-3 dB width)
Sidelobe Level (Tx and Rx antenna)	Below -18 dB (within ±10°) Below -24 dB (outside ±10°)
Noise Figure	Less than 6 dB
Coms/Cabling/Mounting	
Com Protocol	High-Speed Ethernet (100 Base-T)
Heading	NMEA 2000®/SimNet (with RI-10 interface box - included)
Inter-Connecting Cable Length	32.8 ft/20 m
Maximum Inter-Connecting Cable Length	98.4 ft/30 m (available option)
Bolts (4)	M8 x 30 - 304 stainless steel
Footprint	9.17 in/233 mm ((port to stbd) 5.57 in/141.5 mm (bow to stern)

*Specifications subject to change without notice

