



SPECIFICATIONS	
Input Voltage	12 or 24 Vdc (Min: 10.8V, Max: 31.2 V)
Networking	Wi-Fi or wired Ethernet (RayNet)
Antenna Type	Patch Array
Power Consumption	Transmit mode 17W; standby mode 7W; sleep mode 2W
Max. Range Scale:	from 1/16 to 24 nautical miles
Transmit Frequency	9354 to 9446 MHz
Peak Power Output	20W
Duplexer	Circulator
Pulse Widths (3 dB)	40 ns to 14.7 µs
CHIRP Lengths	400 ns to 20 µs
CHIRP Bandwidth	Up to 32 MHz
IF Bandwidth	26 MHz
Noise	Less than 4 dB
Beamwidth (nominal)	4.9° horizontal and 20° vertical
Polarisation	Horizontal
Waterproofing	IPX6
Weight	5.6 kg (12.3 lb)

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### UNDERSTANDING RADAR RANGE AND TARGET HEIGHT

The mounting height of your scanner above the water directly impacts the minimum and maximum target detection range. Quantum can detect objects as close as 18' (5.5 metres) away.

### SIMPLIFIED INSTALLATION

- Simple Wi-Fi connection between Quantum and any Raymarine LightHouse II-powered MFD
- Quantum's small diameter power cable is easy to route through tight spaces
- Easy to upgrade Quantum uses the same bolt pattern as previous generation radars.
- Optional Quantum adapter cable eliminates the need to run new radar cables



Product features and specifications sometimes change without notice. Please visit our website for latest product information. Some images in this brochure have been used for illustration purposes only.

## NEW

## QUANTUM<sup>™</sup> WIRELESS CHIRP RADAR



www.raymarine.com

# QURNTUM



Quantum Radar is the world's first compact marine radar to use CHIRP pulse compression technology. Setting a new standard for solid state marine radar, Quantum delivers superior radar imaging on both long and extremely short ranges. Integrated Wi-Fi makes installation easy and Quantum's energy efficient and lightweight design provides safe radiated emissions and reduced power consumption.

### SUPERIOR PERFORMANCE

- Quantum's CHIRP Pulse Compression technology uses multiple compressed radar pulses with FLIR's exclusive ATX<sup>™</sup> advanced target separation technology
- Quantum with ATX<sup>™</sup> displays targets like boats, landmarks, buoys, and weather cells with unsurpassed resolution and separation quality versus traditional magnetron radars.
- Excellent short-range detection and enhanced target detail with 18' (6m) minimum range
- Immediate awareness Quantum starts up and is ready to go in seconds
- Superior interference rejection eliminates noise from other radars





### ENERGY EFFICIENT AND LIGHTWEIGHT DESIGN

- Weighs 50% less than traditional magnetron radars
- Safe emissions thanks to Quantum's low power solid state transmitter
- Very low power consumption (17W transmit and 7W standby)
- Extended vessel battery life when under sail





Magnetron radar







### FLIR ATX<sup>™</sup> ADVANCED TARGET SEPARATION TECHNOLOGY Quantum identifies small, weak targets, even when positioned close to strong returns like this kayaker close to the seawall



SHORT RANGE PERFORMANCE

Quantum's CHIRP Pulse Compression technology is substantially better at identifying targets at close range when compared to a traditional magnetron radar.





Magnetron radar



Quantum





### **BETTER RANGE RESOLUTION**

Range resolution is a radar's ability to separate targets within individual spokes of the radar pulse. Quantum uses compressed high intensity pulses (CHIRP) to deliver much greater range resolution than traditional magnetron radars.

### QUANTUM PERFORMANCE FEATURES

- CHIRP pulse compression technology delivers sharper targets on both long and short ranges
- FLIR's exclusive ATX<sup>TM</sup> advanced radar target separation technology
- 18ft (5.5m) minimum range
- Fast start-up solid state transmitter
- 256 colour palette for enhanced target identification
- 24nm maximum range
- Dual radar compatible



Quantum is compatible with Wi-Fi enabled a/c/e/eS/gS Series multifunction displays.