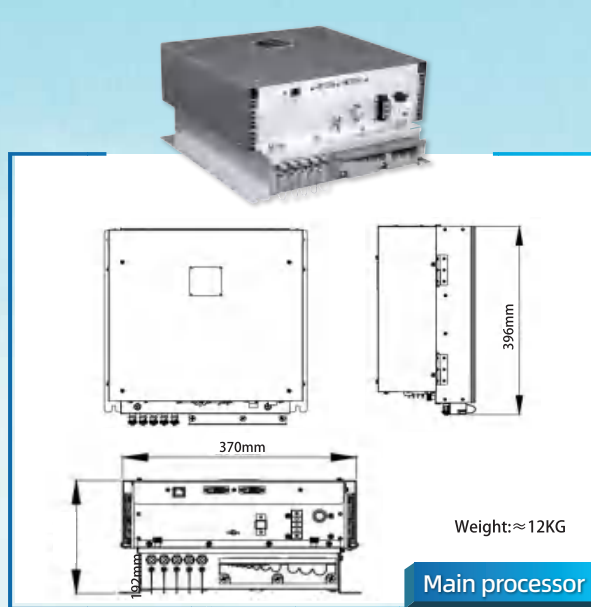
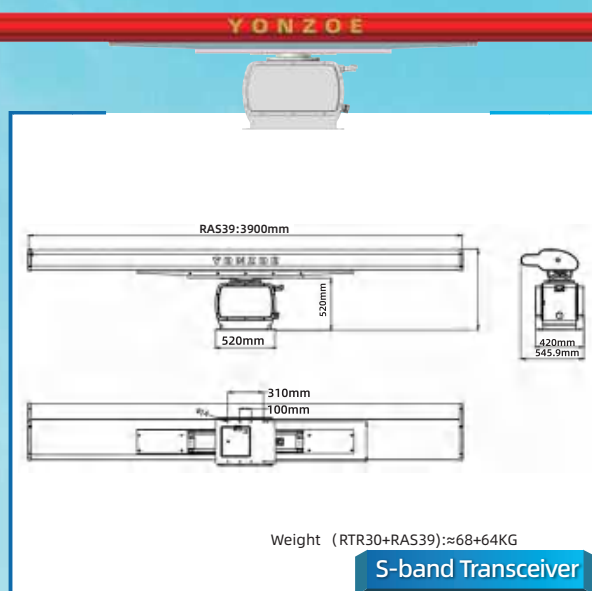
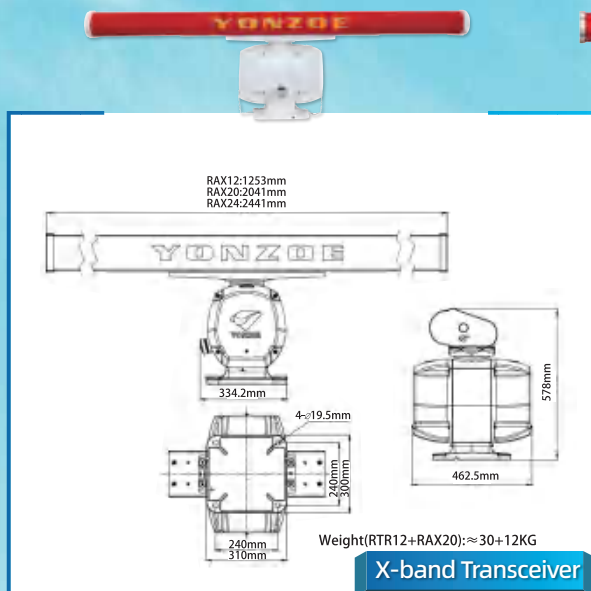


1 The YAR27 Series IMO Marine Radar



Features

- Unique suppression technology for noise reduction, wave clutter, and rain clutter .Excellent performance in small targets detection, far in distance.
- Relative and ground true trails function, monochromatic or gradual in trail color,easy to identify the moving vessels.
- Up to 200 ARPA targets(TT), and 1000 AIS targets, support fusion of the TT and AIS targets.
- Rich radar map marks, 200 waypoints,30 nav-lines.
- Setting polygon surveillance area by mouse or Latitude/Longitude, suitable for specific area monitoring, such as fish farms.
- Complete self-test function, with modular architecture, easy to maintain.
- Support manual heading and postion input, convenient for shore-based platform surveillance, no compass and navigator needed.
- Support bilingual menu, Chinese or English.
- Optional built-in radar Performance Monitor.

SPECIFICATIONS

• Antenna & Scanner Unit

Name	Parameters	
Model	X-band	S-band
Output frequency	9410 ± 30MHz	
Output power (peak)	RTR12/RTR12H 12.5kW	RTR25/RTR25H 25.0kW RTR30/RTR30H 30.0kW
Antenna	Slotted waveguide array	
Polarization	Horizontal	
Model	RAX12	RAX20 RAX24 RAS39
Length	4ft (1.2m)	6.5ft (2m) 8ft (2.4m) 13ft (3.9m)
Beam width(H)	1.85 °	1.25 ° 0.95 ° 1.80 °
Beam width(V)	22 °	22 ° 22 ° 23 °
Sidelobe within ± 10 °	-24dB	-28dB -28dB -24dB
Sidelobe outside ± 10 °	-30dB	-32dB -32dB -30dB
Rotation	24rpm/43rpm	
Pulse length	0.075us;0.15us;0.3us;0.5us;0.7us;1.2us	
Pulse repetition frequency	500Hz;1000Hz;1500Hz;3000Hz	
If	60MHz	
Minimum range	25m	
Range discrimination	25m	
Range accuracy	1% of maximum range in use or 30m, which is greater	
Bearing accuracy	≤1°	

Environmental conditions		
Ambient temperature	-25℃ ~ +55℃	IEC 60945 Ed.4
Storage temperature	-30℃ ~ +70℃	IEC 60945 Ed.4
Waterproof	IPX6	IEC 60529

Performance Monitor (*RPM is optional)		
Model	RPM-X	RPM-S
frequency	9410 ± 45MHz	3050 ± 45MHz
Input power	+8~-+28dBm	
Input pulse length	≥1us	
Output power (2nd pulse)	-56~-36dBm	
Step level	+9~-11dB First to second pulse	
Temperature	-30° ~+80° C	

Compliant IMO radar performance requirements for both conventional and high-speed ships (HSC ≥30 kn) with antenna-scanner - 24 RPM or 43 RPM respectively.

• Display & Processor Unit

Name	parameters	Note
Display size,model	RD19x RD27x	
Effective radar diameter	19.0 " 27"	
Resolution	290mm 323mm	
Color	Yellow ,Green echoes in 32 levels	
Range unit	(NM) or (km)	
Display mode	Head up ; Head up true bearing ; North up ; North up true motion; Course up ; Stern up ;	
Relative or true trails	15s-25min selectable	
Target track	Max 200ARPA target; 0.1N-24NM	Auto or manual
AIS	1000 targets	IMO SN/Circ.217; IEC/PAS 60936-5
Radar map	Navline, waypoints, shorelines, buoys, etc.	
Range (NM)	0.125 0.25 0.5 0.75 1.0 1.5 2 3 6 12 24 32 48 96	
No.of rings	5 5 5 5 5 5 4 6 6 6 6 4 6 8	
Ring interval (NM)	0.025 0.05 0.1 0.15 0.2 0.3 0.5 0.5 1 2 4 8 8 12	
Interface	HDT; GPS/BDS; AIS; LOG; WIND; DEPT; VDR;ARPA DATA;ALARM;RJ45	
Power	Monitor RDxx RDxxD 220VAC(85-130V) -2.0A 220VAC(170-260V) -1.0A 24VDC(18-36V) -10A	xx:19 " 或 27 " with ' D ' for DC
Processor	RPA001 RPA001D 110VAC(85-130) -4.0A 220VAC(170-260) -2.0A 24VDC(18-36V) -20A	with ' D ' for DC

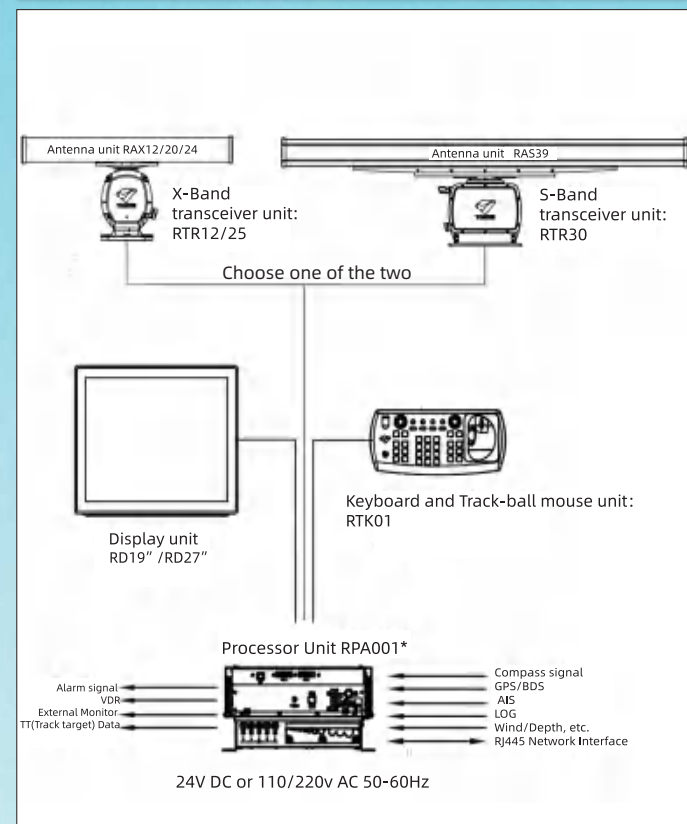
Temperature		
Ambient temperature	-15° C~+55° C	IEC 60945
Storage temperature	-30° C~+70° C	IEC 60945
Waterproof	IPX0	

*Connecting cables: 30m Standard, cable mode is "RC25".

C

MARINE RADAR

CONNECTIONS



SELECTION TREE

