

3 The YR19 Series Marine Radar



RTR04+RAX12 weight ≈ 23+4.5kg
RTR04+RAX18 weight ≈ 23+9.5kg

Transceiver

15" Display

(Optional)

19.0" Display

FEATURES

- Inheriting the advantages of YAR27 technology and excellent performance
- Advanced noise and clutter suppression technology, good ability to detect small targets.
- Good performance in wave and rain suppression.
- 12.1"/15"/19" color display, with resolution 800x600 or 1024x768 or 1280x1024.
- Relative and true trail function, easy to find moving targets.
- Up to 30 ARPA targets, and 500 AIS targets.
- Bilingual menu, Chinese or English.
- Completely self-test function, with modular architecture, easy to maintain
- Suitable for 12V/24VDC applications, range from 10V to 36V DC.

SPECIFICATIONS

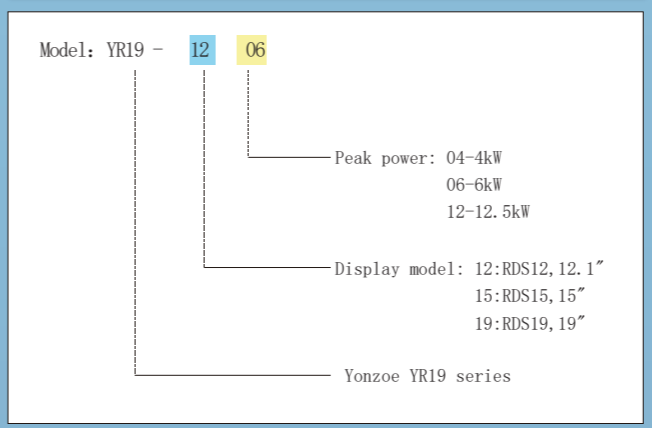
● Antenna & Scanner Unit

Name	Parameters		
Antenna Type	Slotted waveguide array,		
Working frequency	9410±30MHz, X-band		
Peak power	4kW/6kW/12.5kW		
Antenna polarization	Horizontal		
Antenna speed	24rpm (100kn relative velocity wind resistant) 36rpm (70kn relative velocity wind resistant)		
Beam width and Sidelobe suppression	Type	RAX12C (Open)	RAX18C (Open)
	Length	4ft (1.2m)	6ft (1.8m)
	Beam Width(h)	1.85°	1.3°
	Beam Width(v)	22°	22°
	Side Lobe Within ±10°	-24dB	-28dB
	Side Lobe Outside ±10°	-30dB	-32dB
Pulse width and pulse repetition frequency	Pulse type	Length (us)	PRF (Hz)
	S	0.08	2100
	M	0.3	1200
	L	0.8	600
IF	60MHz		
NF	6dB		

● Display & Processor Unit

Name	Parameters			
	Type	RDS12	RDS15	RDS19
Display size and model	Display size	12.1"	15"	19"
	Effective diameter	180mm	220mm	290mm
	Resolution	800x600	1024x768	1280x1024
	Range(NM)	0.125 0.25 0.5 0.75 1 1.5 2 3 6 12 24 32 48 64		
No. of rings and Ring interval(NM)	No. of rings	5 5 5 5 5 5 5 4 6 6 6 6 6 4 6 4		
	Ring interval(NM)	0.025 0.05 0.1 0.15 0.2 0.3 0.5 0.5 1 2 4 8 8 16		
Minimum range	25m			
Range discrimination	25m			
Range accuracy	1% of maximum range in use or 30m, which is greater			
Azimuth discrimination	2.1° (1.2m) / 1.5° (1.8m)			
Azimuth accuracy	1°			
Display mode	Heading up, North up, North up true motion, Course up			
Tuning	Manual or automatic			
ARPA Qty	Automatic or manual acquisition up to 30 targets, 0.1NM~24NM			
AIS	Up to 500 targets			
Radar map	Nav-line, waypoints, shorelines, buoys, etc.			
Alert area	One settable sector area			
Self-test	Voltage, current, temperature, interface information, software version, interface data, etc.			

SELECTION TREE



Ambient Environmental			
Ambient temperature	Outdoor(antenna and transceiver)	-25℃~+55℃	
	Indoor(host and display)	-15℃~+55℃	
Storage temperature	-30℃~+70℃		
Relative humidity	95% (+40℃)		
Waterproof			
Outdoor devices	IPX6		
Indoor host machine	IPX3		
EMC: in accordance with relevant specifications and clauses of IEC60945Ed. 4.			
Interface			
Input signal (IEC 61162)	IS, THD(Gyroscope or Satellite Sutra), EPFS(GPS or BD2positioners), S MDE(Speedometer or satellite locator)		
Output signal	Alarm output, VGA/DW output, TTDATA(Optional)		
Power supply			
Power	Nominal (V)	Range (V)	Power (W)
DC	24	10~36	<100