PREVIEW

KODEN

Marine Radar

MDC-5000 Series

Powerful and Precise
Professional Grade

Features

- Clear image with High-speed sampling in short range
- CFAR, auto GAIN and STC with simple operation
- Improved visibility by PROCESS and VIDEO functions
- Built-in AIS interface for displays up to 500 targets
- Built-in TT (ARPA) tracks up to 50 targets
- C-Map chart (NT or MAX) can be displayed with the radar image (Chart: Owner supplied)
- Black Box type connects to any XGA and UXGA type display
- Output power: 4 models (4kW, 6kW, 12kW, 25kW)

SPECIFICATIONS

Antenna-scanner unit

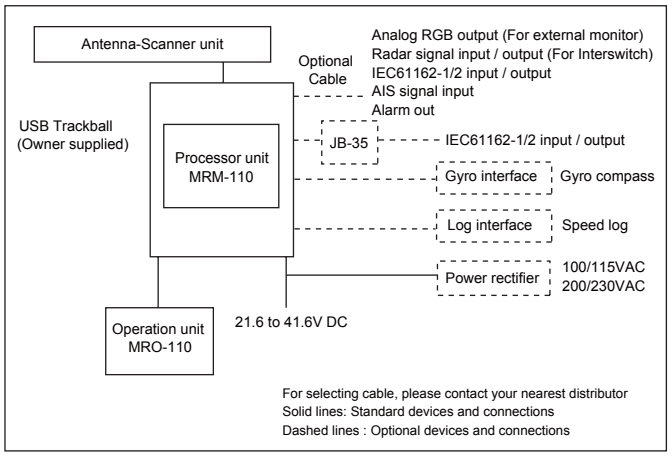
Model	MDC-5004	MDC-5006 / 5060	MDC-5012 / 5010	MDC-5025 / 5020
Type	RB806	RB807 / RB717A	RB808 / RB718A	RB809 / RB719A
Antenna type	Open antenna			
Antenna length	3 feet /4 feet / 6 feet	4 feet / 6 feet	4 feet / 6 feet / 9 feet	4 feet / 6 feet / 9 feet
Output power (Peak)	4 kW	6 kW	12 kW	25 kW
Output frequency	9410 MHz ± 30 MHz			
Horizontal beam width	3 feet : 2.5° / 4 feet : 1.8° / 6 feet : 1.2° / 9 feet : 0.8°			
Vertical beam width	3,4, 6 feet : 22° / 9 feet : 25°			
Rotation	24 rpm or 48 rpm		24 rpm or 42 rpm	
IF center frequency	60 MHz			
Range accuracy	8 meters or 1% of the range scale selected, whichever is the greater			
Minimum detecting distance	Within 40 m			
Range resolution	Within 40 m			
Warm-up time	2 min			3 min
Pulse width	0.08 µs , 0.15 µs , 0.3 µs , 0.5 µs , 1.0 µs (4kW only) 0.08 µs, 0.15 µs, 0.3 µs, 0.4 µs , 0.6 µs , 0.8 µs , 1.2 µs (6kW,12kW,25kW)			
Environmental				
Operating temperature	-25°C to +55°C			
Water Protection	IPX6			

Processor unit

Processor unit	MRM-110
Display resolution	1024 x 768 pixels (XGA)
Off-centering	**Max. 75 %**
Range Scales	0.125 | 0.25 | 0.5 | 0.75 | 1.5 | 3 | 6 | 12 | 24 | 48 | 64 | 96
Range interval	0.0625 | 0.125 | 0.25 | 0.5 | 1 | 2 | 4 | 8 | 16 | 16
	(48 NM: 4 kW only, 64 NM: 6 kW, 12 kW only, 96 NM: 25 kW only)
Presentation modes	Head-up, North-up (True motion)*, North-up (Relative motion)*, Course-up (True motion)*, Course-up (Relative motion)*
Video levels	16
Range unit	NM, km, sm, kf, ky
Functions	Chart overlay, CFAR (Clutter rejection), Interference rejection, Target expansion, Process (Averaging), VRM, EBL, Parallel index, Cursor position, Bearing (true*/ relative), Trail (true / relative)*, Own ship past track*, MAP ,(Event mark* etc.), Analog RGB output
Input data format and sentences	IEC61162-1 / -2 BWC, DBT, DPT, DTM, GGA, GLC, GLL, GNS, HDG, HDT, HDM, MTW, RMA, RMB, RMC, ROT, RTE, THS, VBW, VDR, VHW, VTG, WPL, XTE, ZDA
Output data format and sentences	IEC61162 -1 / -2 DTM, EVE, GLL, HBT, HDT, ROT, RSD, OSD, POS, THS, TLB, TLL, TTD, TTM, VBW, VDR, VHW, VTG, ZDA
AIS interface*	500 Targets
TT (ARPA)*	Auto / Manual 50 Targets
Power supply	21.6 to 41.6 VDC
Power Consumption (at 24 VDC)	100 W or less | 130 W or less | 150 W or less | 200 W or less
Environmental	
Operating temperature	-15°C to +55°C
Water Protection	Processor unit (MRM-110) : IPX0 Operation unit (MRO-110) : IP23

* Requires heading, speed, and / or position signal input from external equipment including GPS Compass depending on application of user.

CONNECTIONS



EQUIPMENT LIST

Standard Equipment

Scanner unit	RB806	4 kW
	RB807	6 kW
	RB808	12 kW
	RB809	25 kW
Antenna unit	RW701A-03	3 feet
	RW701A-04	4 feet
	RW701A-06	6 feet
	RW701B-09	9 feet
Processor unit	MRM-110	
Operation unit	MRO-110	With 2 m connecting cable
Connecting cable(RB807 / RB808 / RB809)	CW-845-15	15 m with connectors on both ends
(RB806 only)	242J159098B-15M	
DC power cable	CW-259-2M	2 m
Operation manual, Installation manual, Quick reference, Installation material, Fuse		

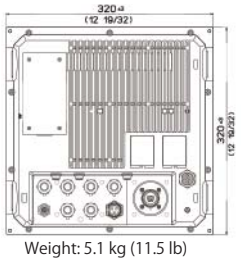
Option

Gyro interface unit, Log interface unit, Power rectifier, AC power cable, Connecting cables, Junction Box

DIMENSIONS AND WEIGHT

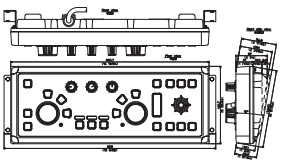
Unit: mm (inch)

Processor unit:
MRM-110



Weight: 5.1 kg (11.5 lb)

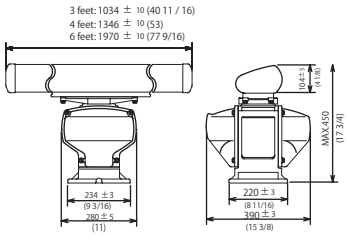
Operation unit:
MRO-110



Weight: 2 kg (4 .5 lb)

Antenna-scanner unit:

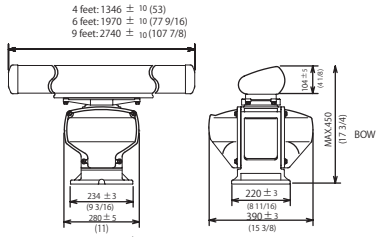
RB806



Weight:

3 feet: 21.5 kg (47 lb)
4 feet: 22.5 kg (50 lb)
6 feet: 24.5 kg (54 lb)

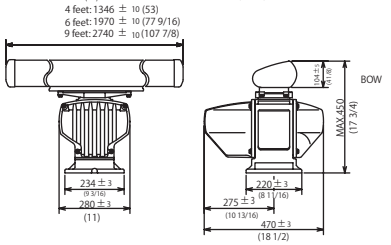
RB807 / RB808



Weight:

4 feet: 24 kg (53 lb)
6 feet: 26 kg (57.5 lb)
9 feet: 30 kg (66.5 lb)

RB809



Weight:

4 feet: 26 kg (57.5 lb)
6 feet: 28 kg (62 lb)
9 feet: 32 kg (71 lb)

• Design and specifications are subject to change without notice.

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Safety precaution | To ensure proper and safe use of the equipment, please carefully read and follow the instructions in the Operation Manual.

For details, please contact

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