

12.1-inch /15-inch Color LCD  
Marine Radar

## MDC-5200/5500 Series

### SPECIFICATIONS

Antenna-scanner unit				
Model	MDC-5204 / MDC-5504	MDC-5206 / MDC-5506	MDC-5212 / MDC-5512	MDC-5225 / MDC-5525
Scanner unit	RB806	RB807	RB808	RB809
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 20 m			
Range resolution	Within 20 m			
Warm-up time	2 min		3 min	
Pulse width	RB806	0.08us, 0.2us, 0.3us, 0.6us, 1.2us		
	RB807 RB808 RB809	0.08us, 0.15us, 0.3us, 0.4us, 0.6us, 0.8us, 1.2us		

Environmental	
Operating temperature	-25°C to +55°C
Water Protection	IPX6

Display unit	
Model	MDC-5200 Series
Display unit	MRD-111
Display size and type	12.1" color TFT LCD
Effective diameter	184 mm
Display resolution	768 x 1024 pixels (XGA)

Echo area	
2 types (Full screen, Inside of effective diameter)	
Basic Range	0.125 to 48 NM
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

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

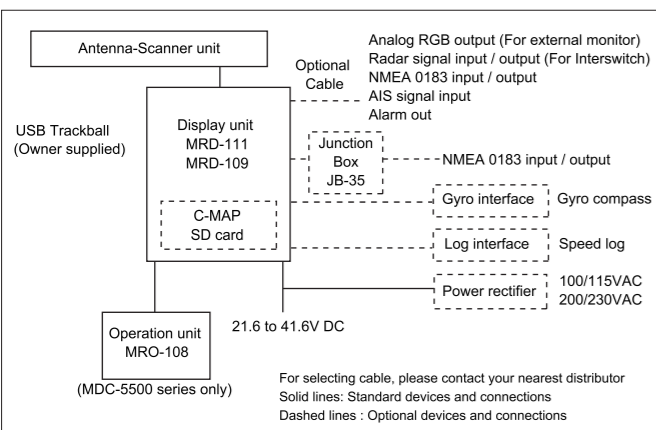
Functions	
Map overlay*, CFAR (Clutter rejection), Interference rejection, Target expansion, Process (Averaging), VRM, EBL, Parallel index, ERBL, Cursor position, Bearing (true/relative), Trail (true/relative), Own ship past track*, MAP, [Event mark* etc.], Analog RGB output	
Input data format and sentences	NMEA 0183
Output data format and sentences	NMEA 0183

AIS interface*	
TT (ARPA)*	1,000 Targets (Standard)
Power supply	21.6 to 41.6 VDC
Power Consumption (at 24 VDC)	100 W or less

Environmental	
Operating temperature	-15°C to +55°C
Water Protection	Display unit : IPX5, Operation unit : IP23 (MDC-5500 series)

\* Requires heading, speed, and / or position signal input from external equipment including GPS Compass depending on application of user.  
\*\* MDC-5500 Series only

### CONNECTIONS

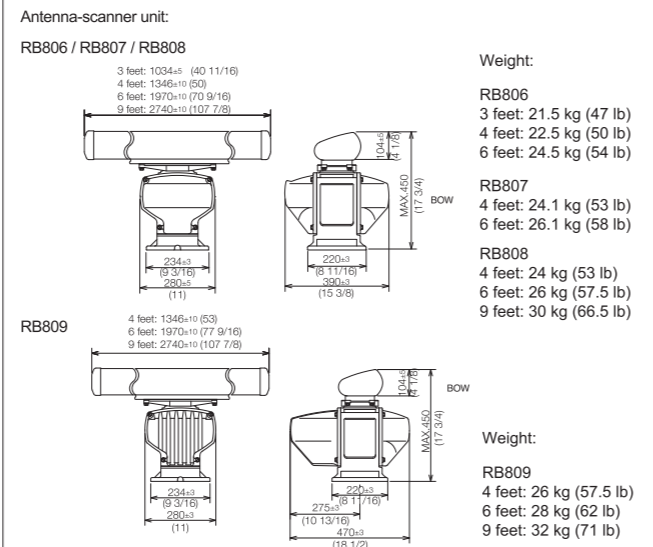
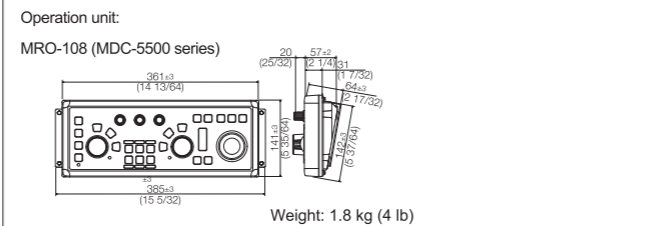
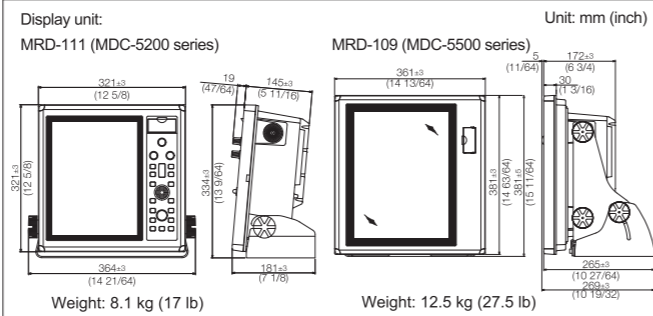


### EQUIPMENT LIST

Standard Equipment			
Antenna-Scanner unit	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	
Display unit (MDC-5200 Series)		MRD-111	
	(MDC-5500 Series)	MRD-109	
Operation unit (MDC-5500 only)	MRO-108	With 2 m connecting cable	
Connecting cable (RB807 / RB808 / RB809)	CW-845	15 m with connectors on both ends	
(RB806 only)	24Z159098B-15M		
DC power cable	CW-259-2M	2 m	
Operation manual, Quick reference, Installation manual, Installation material, Fuse			

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

### DIMENSIONS AND WEIGHT



\* Design and specifications are subject to change without notice.

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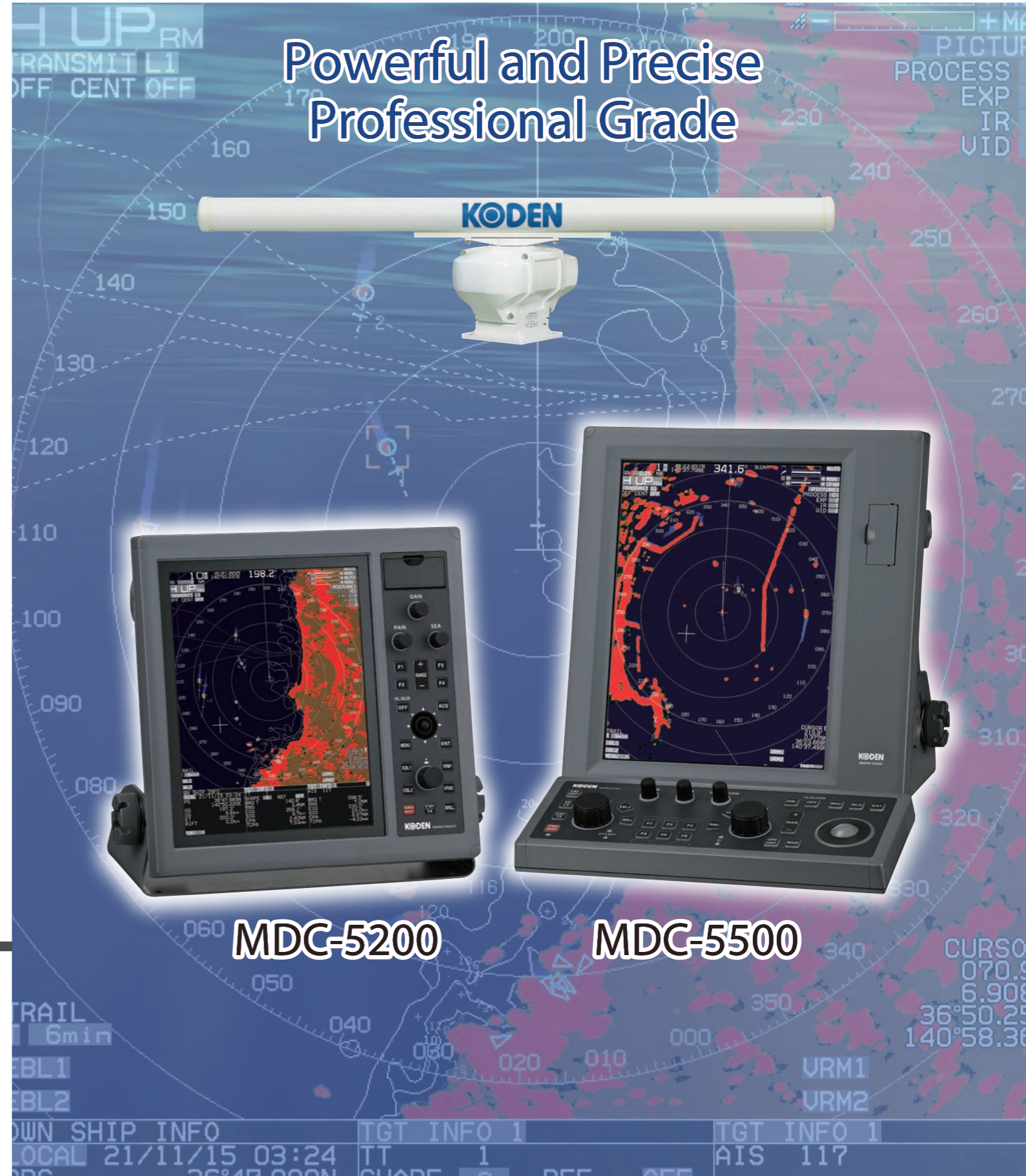
overseas@koden-electronics.co.jp

www.koden-electronics.co.jp



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

For details, please contact:



Powerful and Precise  
Professional Grade



MDC-5200



MDC-5500

# MDC-5200 MDC-5500 Series

MDC-5200 / 5500 series have superior performance and functions of large grade radars. High resolution XGA display with anti-reflection coating makes clear image.

Model	12.1-inch Display type				15-inch Display type			
Standard model	MDC-5240	MDC-5260	MDC-5210	MDC-5220	MDC-5540	MDC-5560	MDC-5510	MDC-5520
CE model	MDC-5204	MDC-5206	MDC-5212	MDC-5225	MDC-5504	MDC-5506	MDC-5512	MDC-5525

## Features

- Clear image with High-speed sampling in short range.
  - Auto GAIN with simple operation.
  - Improved visibility by auto STC.
  - Simple and easy operation by remote trackball via USB.
  - Built-in AIS interface for displays up to 1000 targets.
  - Built-in TT(ARPA) tracks up to 100 targets.
- C-Map chart(NT MAX) can be overlaid on the radar screen. (Chart : owner supplied)

## Map Overlay

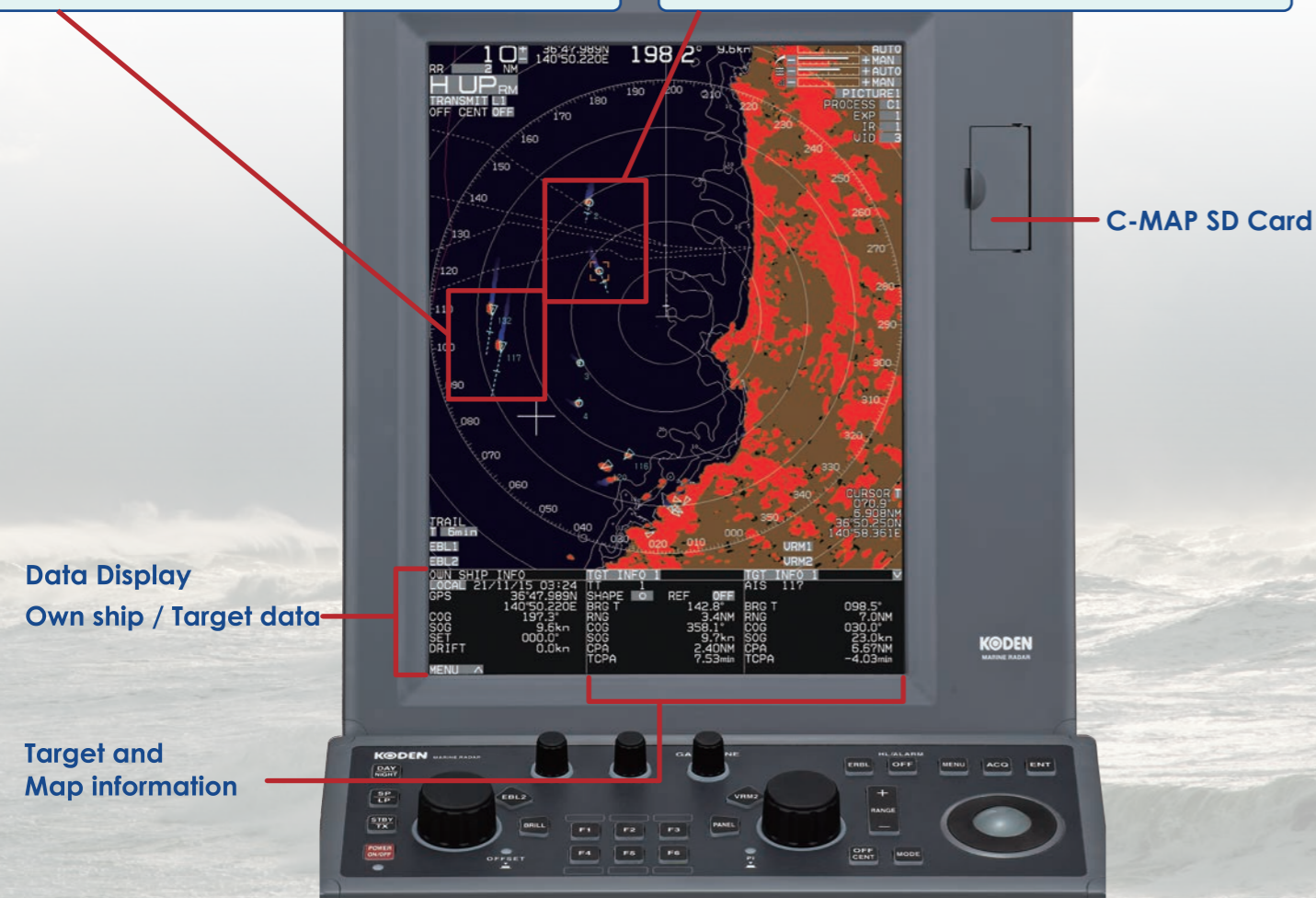
C-Map chart (NT MAX)\*\* can be overlaid on the radar screen to provide clear radar pictures of coastlines, buoys, and other features. C-Map NT MAX "World Wide" back ground chart is built-in as standard. \*\*Owner supplied. Basic chart information only. Extra features of C-Map such as photo indication are not available.

## AIS

Built-in AIS interface for displaying up to 1000 targets.

## TT (ARPA)

Built-in TT (ARPA) tracks up to 100 targets. Selectable auto acquisition or manual acquisition.



## Standard model

MDC-5240 / 5540	: 4 kW	3 feet / 4 feet Open
MDC-5260 / 5560	: 6 kW	4 feet / 6 feet Open
MDC-5210 / 5510	: 12 kW	4 feet / 6 feet Open
MDC-5220 / 5520	: 25 kW	6 feet / 9 feet Open

## CE model

MDC-5204 / 5504	: 4 kW	3 feet / 4 feet / 6 feet Open
MDC-5206 / 5506	: 6 kW	4 feet / 6 feet Open
MDC-5212	: 12 kW	4 feet / 6 feet Open
MDC-5512	: 12 kW	4 feet / 6 feet / 9 feet Open
MDC-5225	: 25 kW	4 feet / 6 feet Open
MDC-5525	: 25 kW	4 feet / 6 feet / 9 feet Open

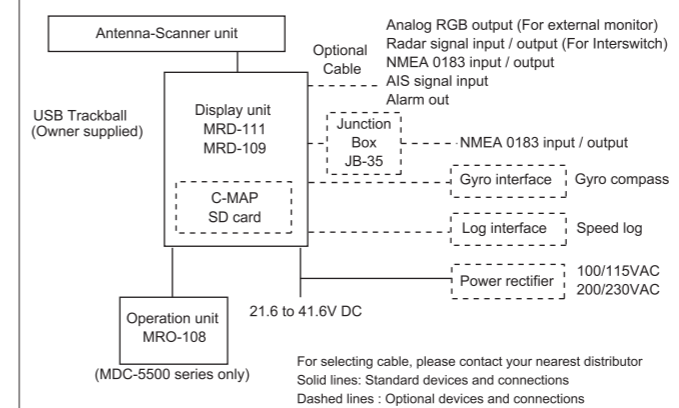
## Standard model

## SPECIFICATIONS

Antenna-scanner unit			
Model	MDC-5240 / MDC-5540	MDC-5260 / MDC-5560	MDC-5210 / MDC-5510
Scanner unit	RB716A	RB717A	RB718A
Antenna type	Open antenna		
Antenna length	3 feet / 4 feet	4 feet / 6 feet	4 feet / 6 feet
Output power (Peak)	4 kW	6 kW	12 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		
IF center frequency	60 MHz		
Range accuracy	8 meters or 1% of the range scale selected, whichever is the greater		
Minimum detecting distance	Within 20 m		
Range resolution	Within 20 m		
Warm-up time	2 min	3 min	
Pulse width	RB716A	0.08 to 0.15us, 0.08us, 0.15us, 0.3us, 0.5us, 1.0us	
	RB717A	0.08us, 0.25us, 0.5us, 0.7us, 1.0us	
	RB718A	0.08us, 0.3us, 0.6us, 0.8us, 1.2us	
	RB719A		
Environmental			
Operating temperature	-25°C to +55°C		
Water Protection	IPX6		
Display unit			
Model	MDC-5200 Series		MDC-5500 Series
Display unit	MRD-111		MRD-109
Display size and type	12.1" color TFT LCD		15" color TFT LCD
Effective diameter	184 mm		228 mm
Display resolution	768 x 1024 pixels (XGA)		
Off-centering	Max. 75 %		
Echo area	2 types (Full screen, Inside of effective diameter)		
Basic Range	0.125 to 48 NM	0.125 to 64 NM	0.125 to 96 NM
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, 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	Map overlay*, CFAR (Clutter rejection), Interference rejection, Target expansion, Process (Averaging), VRM, EBL, Parallel index, ERBL, Cursor position, Bearing (True/relative), Trail (true/relative)*, Own ship past track*, MAP(Event mark* etc.), Analog RGB output		
Input data format and sentences	NMEA 0183 BW, 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	NMEA 0183 DTM, EVE, GLL, HBT, HDT, ROT, RSD, OSD, POS, THS, TLB, TLL, TTD, TTM, VBW, VDR, VHW, VTG, ZDA		
AIS interface*	1,000 Targets (Standard)		
TT (ARPA)*	Auto / Manual 100 Targets (Standard)		
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	Display unit : IPX5, Operation unit : IP23 (MDC-5500 series)		

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Operation unit (MDC-5500 only)	MRO-108	With 2 m connecting cable	
Connecting cable	242J159098B-15M	15 m with connectors on both ends	
DC power cable	CW-259-2M	2 m	
Operation manual, Quick reference, Installation manual, Installation material, Fuse			
Option			
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## DIMENSIONS AND WEIGHT

