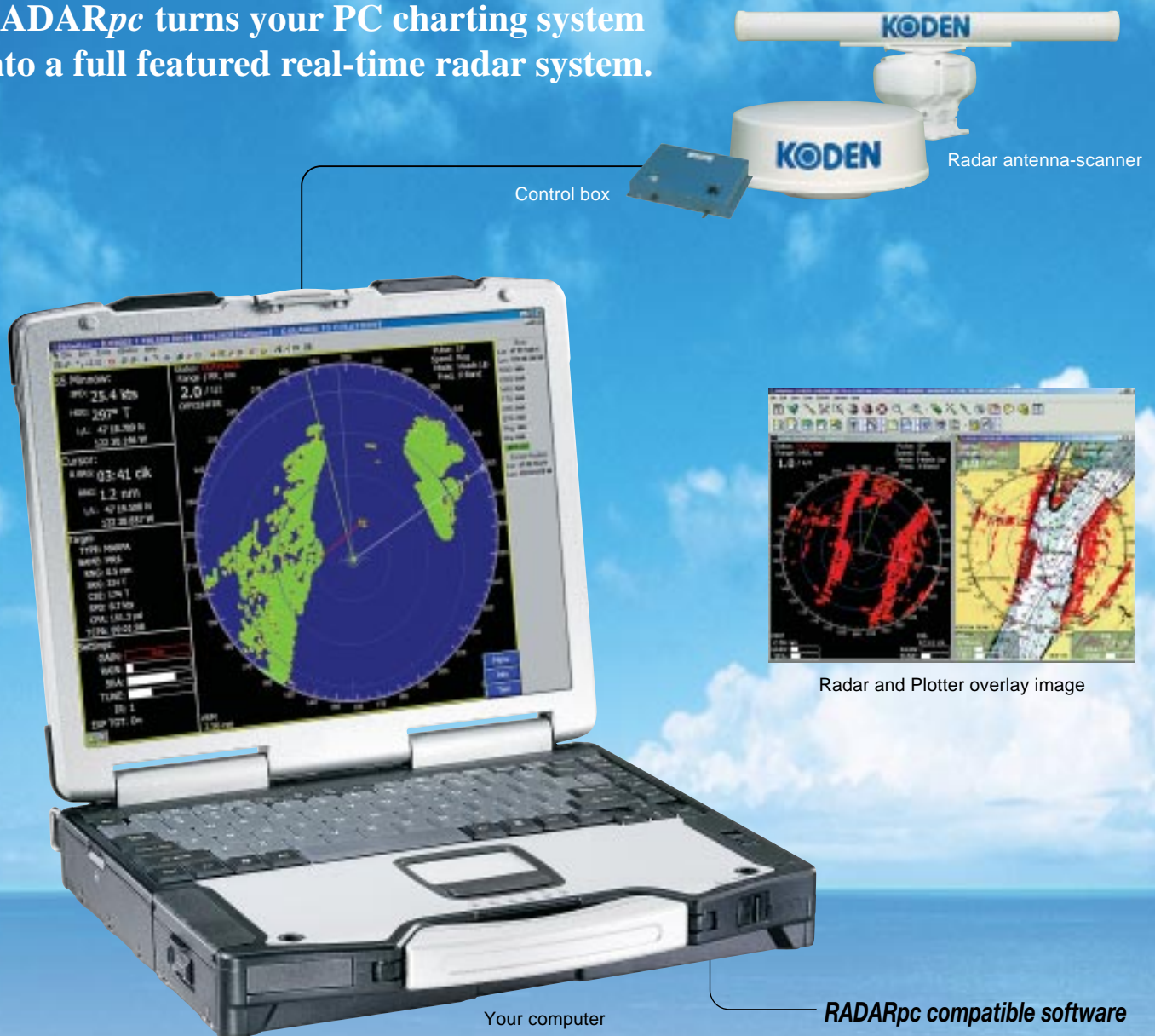


MDS-50R/51R/52R/61R/62R/63R

RADAR_{pc} turns your PC charting system into a full featured real-time radar system.



FEATURES

- **Full range of radar variation:**

A combination of the MDS-5R or MDS-6R control box and any antenna-scanner unit covers full range of Koden radar variety selection.

- **High speed data communication:**

Ethernet data communication gives interfaceability with almost every PC. Multi PC network system can be constructed.

- **Full performance on the compatible software:**

Variety of RADAR_{pc} compatible software including Nobeltec, Euronav, P-Sea gives you stand alone, side by side or overlay radar image with full radar control in addition to their advance charting capability.

SPECIFICATIONS

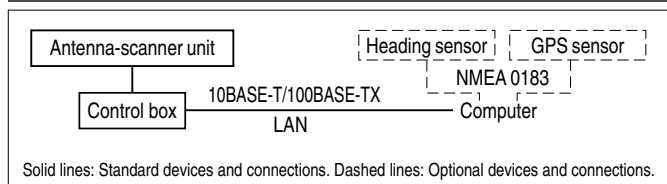
Model	MDS-50R	MDS-51R	MDS-52R	MDS-61R	MDS-62R	MDS-63R
Antenna-Scanner model	RB714	RB715A	RB716A	RB717A	RB718A	RB719A
Antenna length	1.2 feet (Radome)	2 feet (Radome)	3 feet 4 feet	4 feet 6 feet	4 feet 6 feet	6 feet 9 feet
Peak power output	2 kW	4 kW		6 kW	12 kW	25 kW
Frequency	9445 ± 30 MHz					
Beam width	Horizontal Vertical	6.0° 25°	3.9° 25°	2.5° 1.8° 22°	1.8° 1.2° 22°	1.8° 1.2° 22°
Rotation	24 rpm					
IF center frequency	60 MHz (Logarithmic amplifier)					
Noise figure	6.5 dB of less					
Operating temperature	-25°C to +55°C					
Operation in wind (relative)	100 knots					
Water Protection	CFR-46	IPX6 (IEC945)				
Control box	MDS-5R			MDS-6R		
Range scales	0.125 to 24 nm	0.125 to 36 nm	0.125 to 48 nm	0.125 to 64 nm	0.125 to 72 nm	0.125 to 96 nm
Presentation modes	Head up, North up**, Course up**					
Echo trail interval***	OFF, 15, 30 sec, 1, 3, 6 min, Continuous					
Minimum detecting distance	Better than 25 m at 0.125 nm range					
Range accuracy	Better than 8 m or 0.9% (at the maximum range of the scale in use)					
Bearing accuracy	Better than ±1°					
Range discrimination	Better than 25 m					
Functions of radar image	Gain, STC, FTC, Tune, Interference rejection, Target expansion, Trigger delay adjustment, Heading line adjustment, Full image transfer mode / Quadrant image transfer mode / Real time image transfer mode, Transfer radar image size (240 x 240 / 480 x 480), Off centering**					
Transfer data	Real time image transfer	256 / 512 / 680 dots / sweep (1024 / 2048 / 4096 sweeps per antenna rotation)				Level: 3 bits
Full image transfer size	240 x 240 / 480 x 480 dots				Level: 2 bits	
Quadrant image transfer	120 x 120 / 240 x 240 dots				Level: 2 bits	
Other function	Serial number output	Yes				
Preheat times output (by 5 sec step)	115 sec to 5 sec				175 sec to 5 sec	
Program version up	by Ethernet					
Error output	SHF, System, AZI, RAM, ROM, DHCP server					
Operating temperature	-15°C to +55°C					
Water Protection	None (IPX0)					
Interface	Ethernet					
Serial / Ethernet	Ethernet					
Mode of communication	10BASE-T / 100BASE-TX					
TCP / IP layer	Application layer	Communication command and radar image transfer				
Internet layer	ARP (Address Resolution Protocol), ICMP (Internet Control Message Protocol)					
Transport layer	UDP (User Datagram Protocol)					
Network Interface	Shielded UTP (Unshielded Twisted Pair Cable) with cross style, 2 m (standard)					
Transmission speed	10 Mbps / 100 Mbps					
Output data	Radar image video by proprietary protocol					
Input data	Radar control by proprietary protocol					
Antenna cable length	10 m (standard)				15 m (standard)	
Power	10.2 to 41.6 VDC					
Power supply	21.6 to 41.6 VDC					
Power consumption	45 W or less	55 W or less	70 W or less	80 W or less	90 W or less	130 W or less
Warm-up time	2 min.					3 min.

* 48 rpm requires for input voltage of 24 VDC or more ** Requires bearing data *** Unavailable at the time of real time image transfer mode

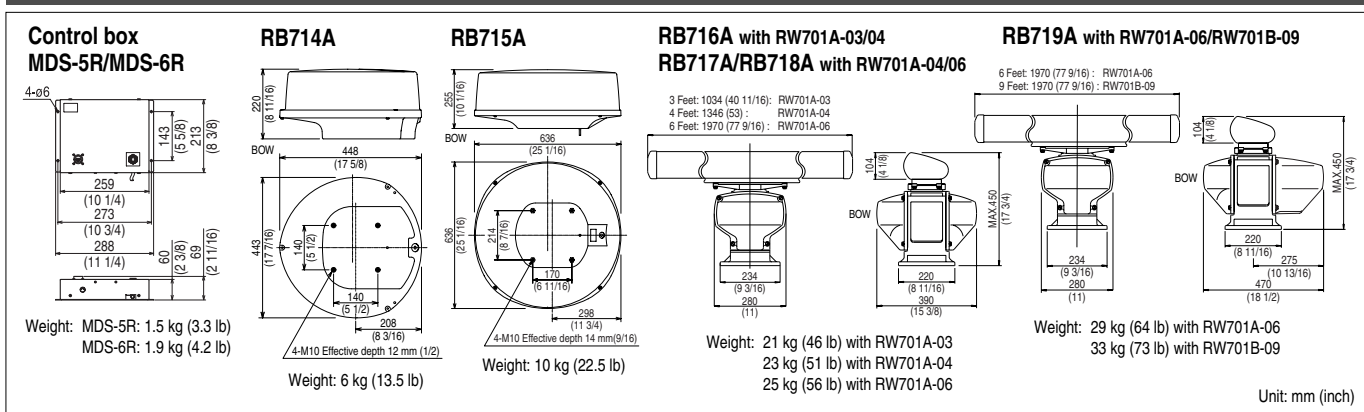
EQUIPMENT LIST

Standard equipment	Control box	1
	Antenna-scanner unit	1
	Connecting cable	1
	Power switch	1
	DC power cable	1
	LAN data cable	1
	Spare parts kit	1
	Installation materials	1
	Installation manual	1

CONNECTIONS



DIMENSIONS AND WEIGHT



• 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: