

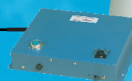
MDS-51R/52R/61R/62R/63R

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

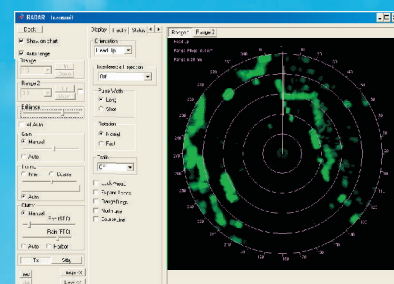


Radar antenna-scanner

Control box



Your computer



Radar image



Multi function display with radar overlay and chart plotting



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 seaPro software:**

seaPro charting software from Euronav gives you stand alone, side by side or overlay radar image with full radar control in addition to seaPro's advanced charting capability.

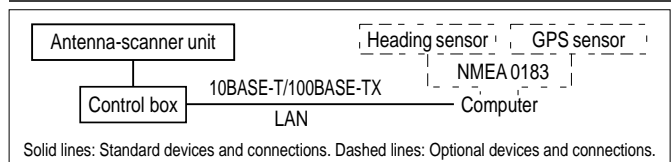
SPECIFICATIONS

Model	MDS-51R	MDS-52R	MDS-61R	MDS-62R	MDS-63R
Antenna unit	RB715A	RB716A	RB717A	RB718A	RB719A
Aerial	2 feet (Radome) 3 feet	4 feet	4 feet	6 feet	6 feet
Peak power output	4 kW		6 kW	12 kW	25 kW
Transmitting frequency	9410 ± 30 MHz				
Beam width	Horizontal 3.9°	2.5°	1.8°	1.8°	1.2°
	Vertical 25°	22°	22°	22°	25°
Rotation	24/48 rpm				
Pulse length / PRF	S 0.08 μ sec / 2000 Hz	0.08 μ sec / 2000 Hz		0.08 μ sec / 2000 Hz	
	M 0.25 μ sec / 1500 Hz	-		-	
	M1 -	0.3 μ sec / 1500 Hz		0.3 μ sec / 1300 Hz	
	M2 -	0.6 μ sec / 1000 Hz		0.6 μ sec / 800 Hz	
	L 0.8 μ sec / 500 Hz	1.0 μ sec / 500 Hz		1.2 μ sec / 450 Hz	
	L1 -	-		-	
	L2 -	-		-	
IF center frequency	60 MHz (Logarithmic amplifier)				
IF bandwidth	S 20 MHz	20 MHz		20 MHz	
	M 20 MHz	-		-	
	M1 -	20 MHz		20 MHz	
	M2 -	3 MHz		3 MHz	
	L 3 MHz	-		-	
	L1 -	3 MHz		3 MHz	
	L2 -	-		3 MHz	
Noise figure	6.5 dB or less				
Operating temperature	-25°C to +55°C				
Operation in wind (relative)	100 knots				
Water Protection	IPX6 (IEC945)				
Control box	MDS-5R		MDS-6R		
Range scales	1/8 to 36 nm	1/8 to 48 nm	1/8 to 64 nm	1/8 to 72 nm	1/8 to 96 nm
Presentation modes	Head up, North up, Course up				
Echo trail interval	OFF, 15, 30 sec, 1, 3, 6 min, Continuous				
Minimum range	Better than 25 m on 1/8 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	Auto/Manual Gain, Auto/Manual/Harbor STC, Auto/Manual FTC, Auto/Manual Tune, Interference rejection, Ex pansion, Trigger delay adjustment, Heading line adjustment, Full image transfer mode / Quadrant image transfer mode / Real time image transfer, Transfer radar image size (240 x 240 / 480 x 480)				
Transfer data size	Real time transfer 256 / 512 / 680 dots / sweep	1024 / 2048 / 4096 sweeps per antenna rotation		Level: 3 bits	
	Full image transfer 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 by Ethernet			175 sec to 5 sec
	Program version up	-			-
	Error output	SHF, System, AZI, RAM, ROM, DHCP server			-
Operating temperature	-15°C to +55°C				
Water Protection	None (IPX0)				
Interface	Ethernet				
Serial / Ethernet	10BASE-T / 100BASE-TX				
Mode of communication	Communication command and radar image transfer				
TCP / IP layer	Application layer	ARP (Address Resolution Protocol), ICMP (Internet Control Message Protocol)			-
	Internet layer	UDP (User Datagram Protocol)			-
	Transport layer	-			-
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	55 W or less				
Power consumption	70 W or less	80 W or less	90 W or less	130 W or less	21.6 to 41.6 VDC
Preheat time	120 sec			180 sec	

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

Control box MDS-5R/MDS-6R	RB715A	RB716A with RW701A-03/04 RB717A/RB718A with RW701A-04/06	RB719A with RW701A-06/RW701B-09

Design and specifications are subject to change without notice.

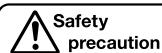
KODEN

Koden Electronics Co., Ltd.

Tamagawa Office:
2-13-24 Tamagawa, Ota-ku, Tokyo, 146-0095 Japan
Tel: +81-3-3756-6501 Fax: +81-3-3756-6509
Uenohara Office:
5278 Uenohara, Uenohara-shi, Yamanashi, 409-0112 Japan
Tel: +81-554-20-5860 Fax: +81-554-20-5875

overseas@koden-electronics.co.jp

www.koden-electronics.co.jp



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: