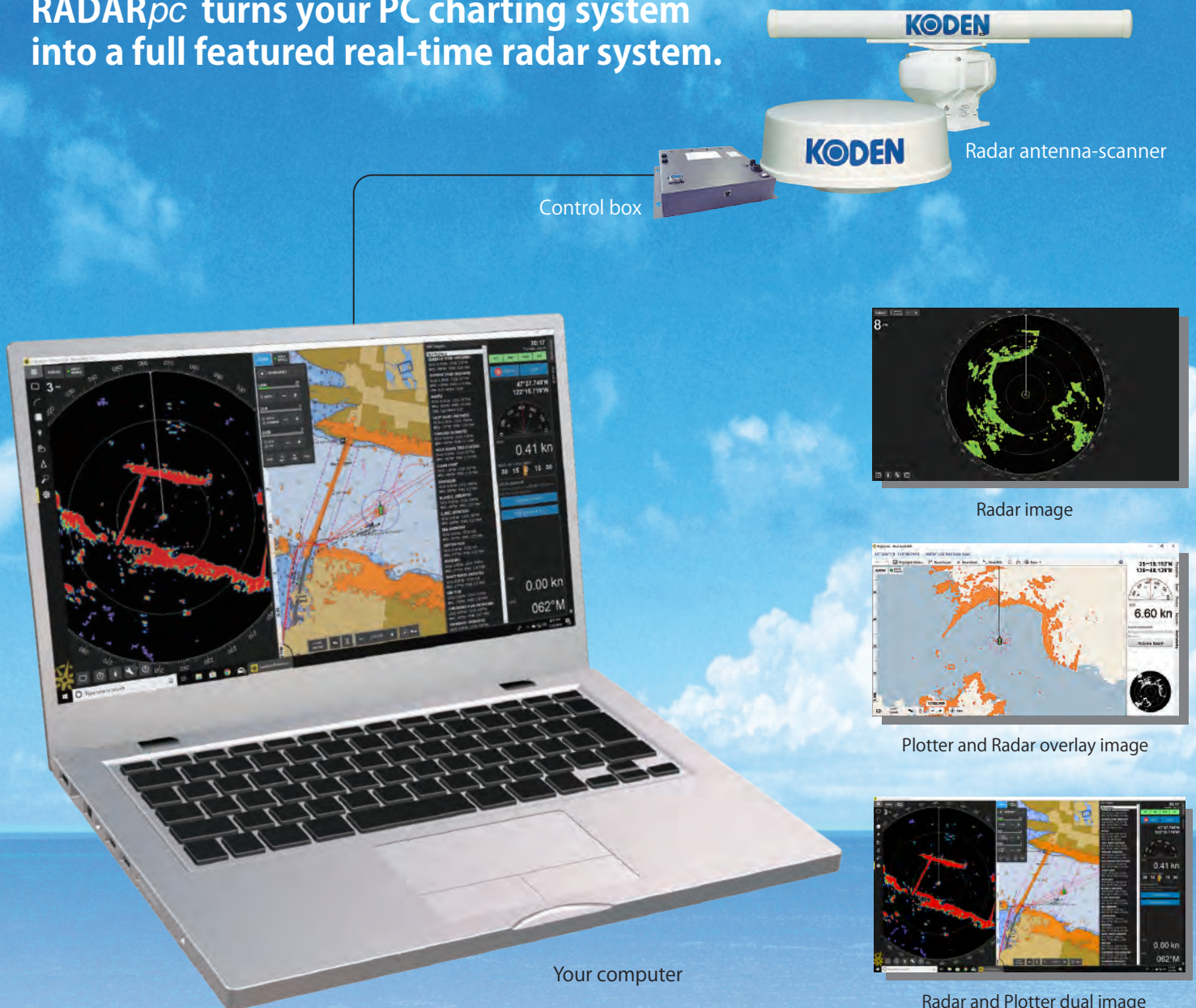


RADAR<sub>pc</sub><sup>®</sup>

# MDS-1100R series

RADAR<sub>pc</sub> turns your PC charting system into a full featured real-time radar system.



## Features

- **Great Range of Antenna-Scanners**

The MDS-11R Control Box can be combined with great range of Koden Antenna - Scanners.

- **High speed data communication:**

Ethernet data communication provides interface capability with most PCs. Multi PC network system can be constructed.

- **Compatible with previous model MDS-5R/6R**

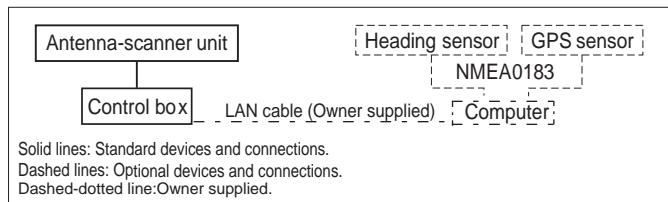
# SPECIFICATIONS

Model	MDS-1103R / 1105R	MDS-1104R	MDS-1106R / 1160R	MDS-1112R / 1110R	MDS-1125R / 1120R
Scanner unit	RB804 / RB805	RB806	RB807 / RB717A	RB808 / RB718A	RB809 / RB719A
Antenna length	1.2 / 2 feet (Radome)	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 ± 30 MHz				
Beam width	Horizontal Vertical	5.9° / 3.9° 25°	2.5° / 1.8° / 1.2° 22°	1.8° / 1.2° / 0.8° 22° / 22° / 25°	1.8° / 1.2° / 0.8° 22° / 22° / 25°
Rotation	24/48 rpm			24/42 rpm (MDS-1112R / 1125R)	24/48 rpm (MDS-1110R / 1120R)
Pulse length / PRF	0.08 μ sec / 2000 Hz 0.15 μ sec / 1800 Hz 0.3 μ sec / 1500 Hz 0.5 μ sec / 800 Hz 1.0 μ sec / 500 Hz		0.08 μ sec / 2500 Hz 0.25 μ sec / 2000 Hz 0.5 μ sec / 1000 Hz 0.7 μ sec / 700 Hz 1.0 μ sec / 500 Hz 1.0 μ sec / 450 Hz		0.08 μ sec / 2000 Hz 0.3 μ sec / 1600 Hz 0.6 μ sec / 800 Hz 0.8 μ sec / 600 Hz 1.2 μ sec / 470 Hz 1.2 μ sec / 400 Hz
IF center frequency	60 MHz				
IF bandwidth	15 MHz / 3MHz				
Noise figure	6.5 dB or less				
Operating temperature	-25°C to +55°C				
Operation in wind (relative)	100 knots				
Water Protection	IPX6				
Control box	MDS-11R				
Basic range	0.125 to 96 nm				
Range accuracy	Better than 8 m or 0.9% (at the maximum range of the scale in use)				
Bearing accuracy	Better than ±1°				
Minimum range	Better than 25 mon 1/8 NM range				
Range discrimination	Better than 25 m				
Functions of radar image	Gain, STC, FTC, Tune, Interference rejection, Expansion, Trigger delay adjustment, Heading line adjustment				
Transfer data size	Real time transfer	256 / 512 / 1024 dots / sweep (1024 / 2048 / 4096 sweeps per antenna rotation)			Level: 3/4 bits
Other function	Preheat times output (by 5 sec step)	115 sec to 5 sec			
	Program version up	by Ethernet			175 sec to 5 sec
	Error output	SHF, System, AZI, PRF, ROM, DHCP server, Mag. current, High voltage			
Operating temperature	-15°C to +55°C				
Water Protection	IPX0				
Ethernet Interface					
Serial / Ethernet	Ethernet				
Mode of communication	Ethernet 100base-TX / 10base-T				
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)				
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					
Power supply	21.6 to 41.6 VDC				
Power consumption	60 W or less	70 W or less	90 W or less	110 W or less	150 W or less

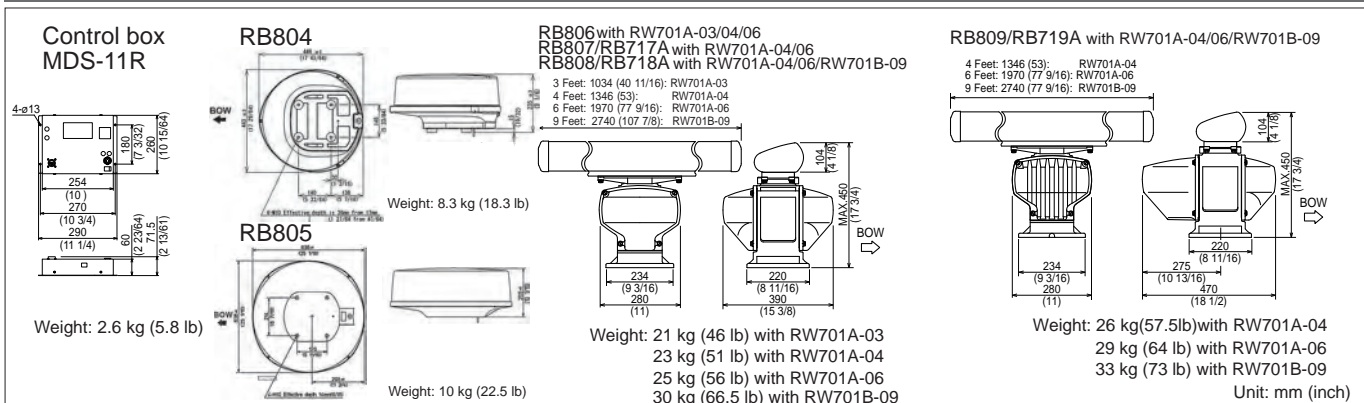
## EQUIPMENT LIST

Standard equipment	Quantity
Control box	1
Antenna-scanner unit	1
Connecting cable	1
DC power 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: