

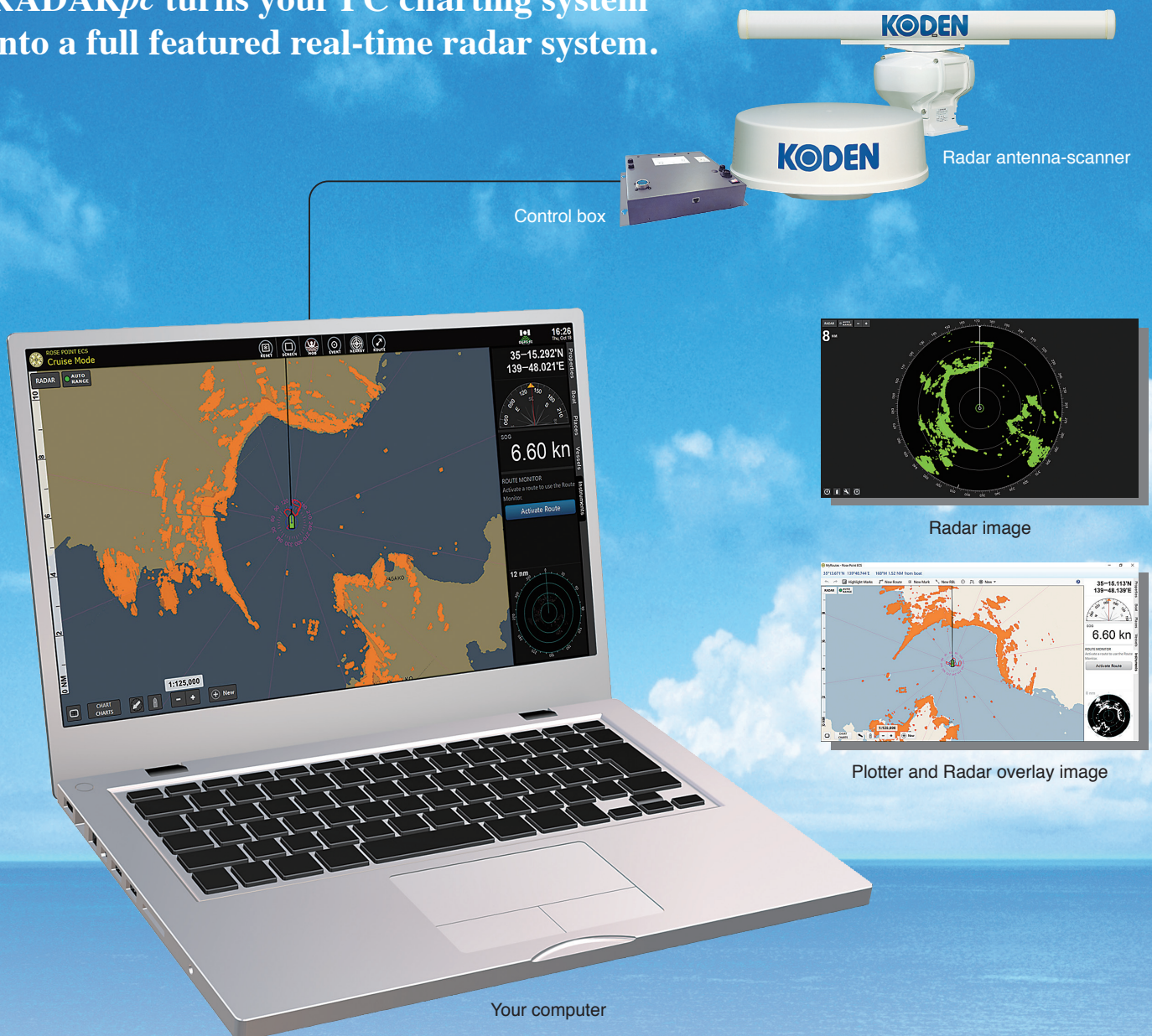
PREVIEW

KODEN

RADAR<sub>pc</sub><sup>®</sup>

# MDS-1100 series

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



## FEATURES

- **Full range of radar variation:**

A combination of the MDS-11R 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.

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

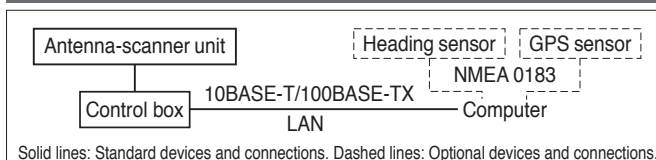
# SPECIFICATIONS

| Model                        | MDS-1105R<br>RB805   | MDS-1104R<br>RB806   | MDS-1106R<br>RB807 | MDS-1112R<br>RB808   | MDS-1125R<br>RB809 |
|------------------------------|--|--|--------------------|----------------------|--------------------|
| Scanner unit                 | 4 kW   |  | 6 kW               |                      | 25 kW              |
| Antenna length               | 2 feet (Radome)  | 3 feet   | 4 feet             | 4 feet               | 6 feet             |
| Output power (peak)          | 4 kW   |  | 6 kW               |                      | 25 kW              |
| Output frequency             | 9410 ° 30 MHz  |  |                    |                      |                    |
| Beam width                   | Horizontal<br>Vertical   | 3.9°<br>25°  | 2.5°<br>22°        | 1.8°<br>22°          | 1.2°<br>22°        |
| Rotation                     | 24/48 rpm  |  |                    |                      |                    |
| Pulse length / PRF           | S  | 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  |                    |
|                              | M2   | -  |                    | 0.6 μ sec / 1000 Hz  |                    |
|                              | L  | 0.8 μ sec / 500 Hz   |                    | 1.0 μ sec / 500 Hz   |                    |
|                              | L1   | -  |                    | -                    |                    |
|                              | L2   | -  |                    | -                    |                    |
| IF center frequency          | 60 MHz (Logarithmic amplifier)   |  |                    |                      |                    |
| IF bandwidth                 | S  | 15 MHz   |                    | 15 MHz               |                    |
|                              | M  | 15 MHz   |                    | -                    |                    |
|                              | M1   | -  |                    | 15 MHz               |                    |
|                              | M2   | -  |                    | 5 MHz                |                    |
|                              | L  | 5 MHz  |                    | 5 MHz                |                    |
|                              | L1   | -  |                    | 5 MHz                |                    |
|                              | L2   | -  |                    | 5 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-11R  |  |                    |                      |                    |
| 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       |
| 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, Expansion, Trigger delay adjustment, Heading line adjustment, Full image transfer mode / Quadrant image transfer mode / Real time image transfer. |  |                    |                      |                    |
| Transfer data size           | Real time transfer   | 256 / 512 / 1024 dots / sweep (1024 / 2048 / 4096 sweeps per antenna rotation) |                    |                      | Level: 3 bits      |
| Other                        | Serial number output   | Yes  |                    |                      |                    |
| function                     | 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            | 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  | Shielded UTP (Unshielded Twisted Pair Cable) with cross style, 2 m (standard)  |                    |                      |                    |
| Network Interface            | 10 Mbps / 100 Mbps   |  |                    |                      |                    |
| Transmission speed           | Radar image video by proprietary protocol  |  |                    |                      |                    |
| Output data                  | Radar control by proprietary protocol  |  |                    |                      |                    |
| Input data                   |  |  |                    |                      |                    |
| Antenna cable length         | 10 m (standard)  |  |                    | 15 m (standard)      |                    |
| Power                        | 21.6 to 41.6 VDC   |  |                    |                      |                    |
| Power supply                 | 55 W or less   |  |                    |                      |                    |
| Power consumption            | 70 W or less   |  | 80 W or less       |                      | 90 W or less       |
| 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-11R**

Weight: 1.5 kg (3.3 lb)

**RB805**

Weight: 10 kg (22.5 lb)

**RB806 with RW701A-03/04  
RB807/RB808 with RW701A-04/06**

Weight: 21 kg (46 lb) with RW701A-03  
23 kg (51 lb) with RW701A-04  
25 kg (56 lb) with RW701A-06

**RB809 with RW701A-06/RW701B-09**

Weight: 29 kg (64 lb) with RW701A-06  
33 kg (73 lb) with RW701B-09

Unit: mm (inch)

• Design and specifications are subject to change without notice.



## Le spécialiste des équipements électroniques

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