

Chapter 1 General Descriptions

1.1 Outline of the equipment

The RA83/84/85/93/94/95 Series of radar is designed and manufactured to meet the IEC technical standards, shown below.

- IEC 60945 4th Edition 2002, General
- IEC 60872-2 and 3: EPA and ATA
- IEC 61162-1: Digital Interface

The equipment is composed of two units, the antenna and the processor. The antenna unit comprises a 4 ft or 6 ft aerial, which is mounted on the transceiver unit of either 6kW (For RA83/93) or 12 kW (For RA84/94), 25 kW (For 85/95) type. The 4 foot and 6 foot aerials are encapsulated in a water-sealed, durable plastic case. The transceiver unit is contained in a waterproof aluminum case.

1.2 Equipment category

The RA83/84/85/93/94/95 series of radar is composed of the component units in the following categories, specified in the IEC 60945 4th edition, Para 4.4.

Antenna Unit (Type RW701A-04/06 + RB717A/RB718A/RB719A):

Exposed to the weather (formerly Class X)

Processor Unit (Type RP100A):

Protected from the weather (formerly Class B)

Operation Unit (Type RO100A):

Protected from the weather (formerly Class B)

1.3 EMC compliance statement

This series of equipment has been tested and verified by the CETCOM Germany, according to the IEC 60945 4th Edition, in terms of Electro Magnetic Compatibility and atmospheric durability against the maritime environment.

1.4 System configuration

The RA83/84/85/93/94/95 radar sets are configured as follows:

Refer to Figure 1 for the system configuration of this series.

RA83

Component Unit	Sub-unit	Type name
Antenna Unit		Not assigned
	Aerial, 4-foot	RW701A-04
	Aerial, 6-foot	RW701A-06
	Transceiver	RB717A (6kW)
Processor Unit		RP100A
Operation Unit		RO100A

RA84

Component Unit	Sub-unit	Type name
Antenna Unit		Not assigned
	Aerial, 4-foot	RW701A-04
	Aerial, 6-foot	RW701A-06
	Transceiver	RB718A (12 kW)
Processor Unit		RP100A
Operation Unit		RO100A

RA85

Component Unit	Sub-unit	Type name
Antenna Unit		Not assigned
	Aerial, 4-foot	RW701A-04
	Aerial, 6-foot	RW701A-06
	Transceiver	RB719A (25 kW)
Processor Unit		RP100A
Operation Unit		RO100A

RA93

Component Unit	Sub-unit	Type name
Antenna Unit		Not assigned
	Aerial, 4-foot	RW701A-04
	Aerial, 6-foot	RW701A-06
	Transceiver	RB717A (6kW)
Processor Unit		RP100A
Operation Unit		RO100A

RA94

Component Unit	Sub-unit	Type name
Antenna Unit		Not assigned
	Aerial, 4-foot	RW701A-04
	Aerial, 6-foot	RW701A-06
	Transceiver	RB718A (12 kW)
Processor Unit		RP100A
Operation Unit		RO100A

RA95

Component Unit	Sub-unit	Type name
Antenna Unit		Not assigned
	Aerial, 4-foot	RW701A-04
	Aerial, 6-foot	RW701A-06
	Transceiver	RB719A (25 kW)
Processor Unit		RP100A
Operation Unit		RO100A

1.5 Software type name used

The RA83/84/85/93/94/95 series of radar uses the following type of software:

NOTE: The asterisk (*) shows revision code, varied from A to Z.

Software Type	Application
KM-D56*	Radar logic board
KM-D62*	Gyro/Log Interface (Option: KSA-08A)
KM-D07*	ATA (Option: MRE-300)
KM-D63*	AIS Interface (Option: AIS-100)

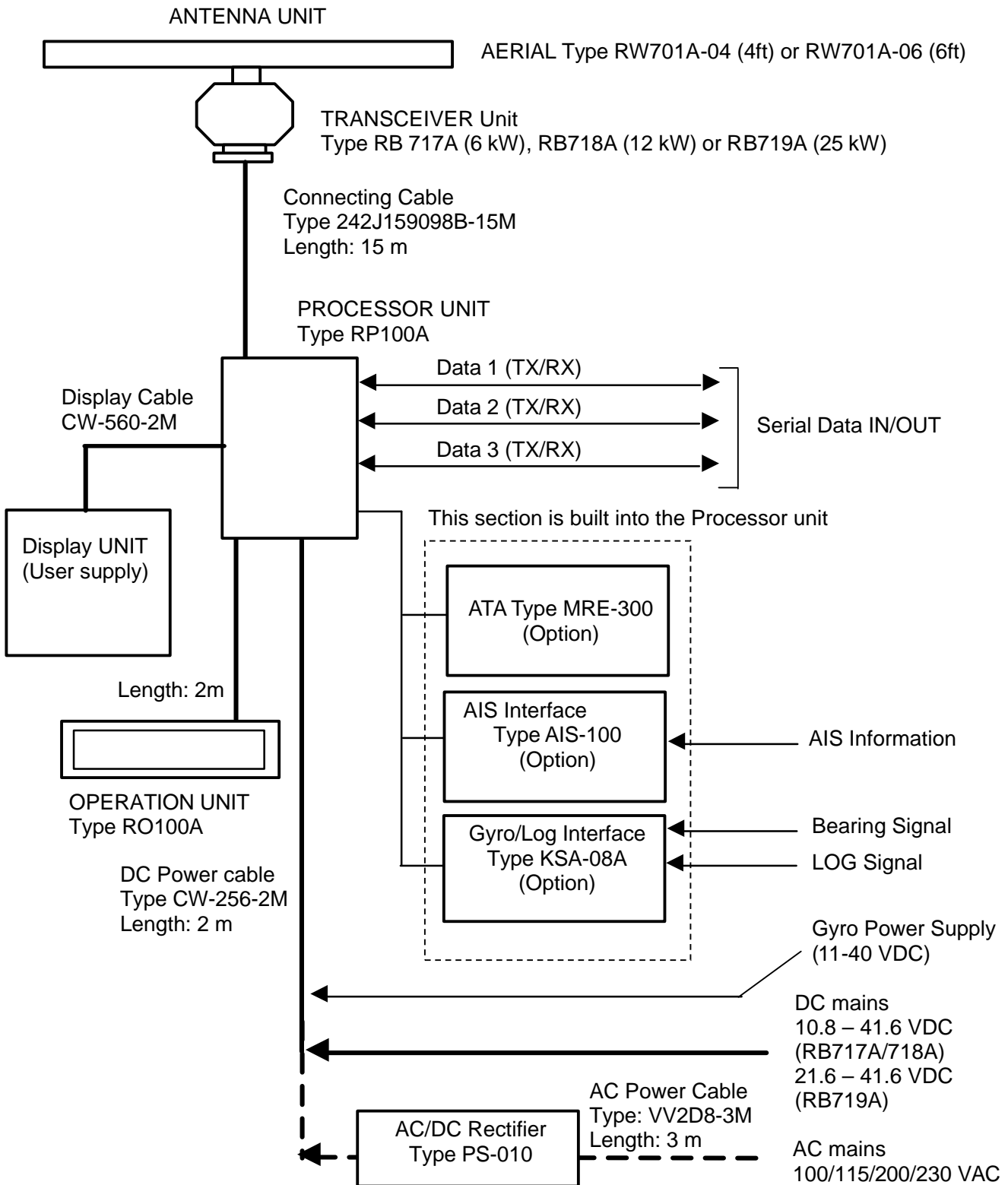


Figure 1.1 System configuration of RA83/84/85/93/94/95 series of radar