

# RHRS 2005RC TFT

## Colour River Radar with 18" TFT Display



### The innovative features of the RHRS-2005RC TFT Radar

- 18.1" daylight TFT display
- enhanced discrimination (a high-pulse frequency rendering increased accuracy)
- easy operation via a combination of function keys, buttons and a menu
- 11 ranges: 250/500/800/1200/1600 metres and 2/4/8/16/32/64 kilometres
- revolutionary short-range pulse technology yielding even better results
- various colour combinations possible
- own vessel is easily drawn on the screen
- meets the latest Rhine navigation requirements
- optional High-Speed antenna renders it particularly suitable for fast vessels
- available with a 6½, 7 or 8 foot antenna
- prepared for map overlay
- prepared for True Trail in the Head Up presentation for the quick recognition of radar targets
- to be connected to various types of modern equipment

The RHRS 2005RC TFT colour river radar is a top product developed by Furuno in close cooperation with Radio Holland Marine. The radar is based on the successful RHRS 2005RC concept. The 18.1 inch TFT screen provides a clear radar image, both at night and during the day, and can be adjusted to a low brilliance level. Therefore the radar is specially suitable for night use.

### Innovative TFT screen

The flat TFT screen is easy to install practically anywhere. The new colour radar is characterized by quality, userfriendly operation and reliability. Experiences gained with river-radar technology combined with knowledge of the latest electronic technology for inland shipping deepsea navigation have resulted in a revolutionary colour radar for an extremely competitive price.

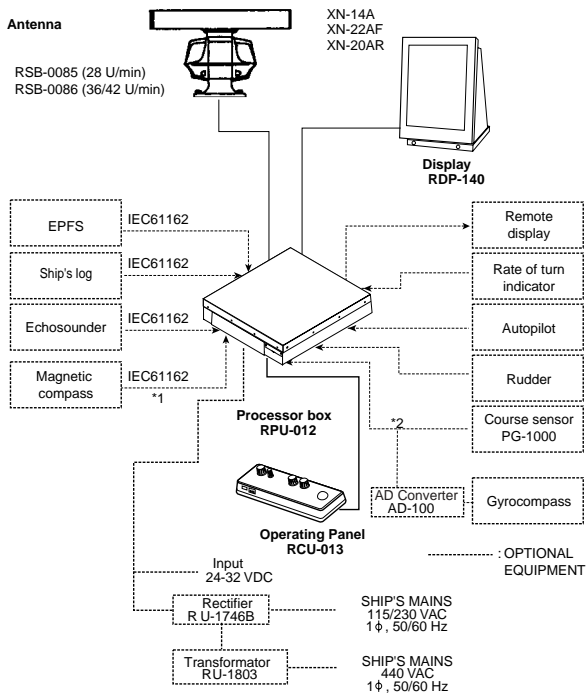
The RHRS 2005RC TFT has been approved for Rhine navigation, under certificate No. R-4-008, issued by the Central Committee for Navigation on the Rhine River.



Member of the Radio Holland Group

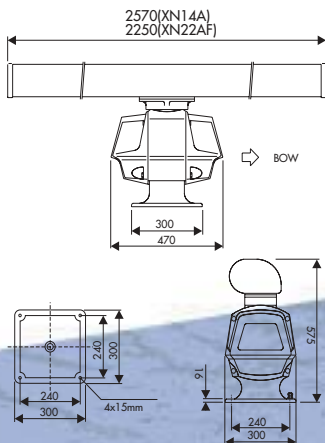
**Radio Holland Netherlands B.V.** Eekhoutstraat 2, 3087 AB Rotterdam  
Havennummer 2121, Postbus 5068, 3008 AB Rotterdam  
Tel. +31 (0)10 428 3344; Fax +31 (0)10 428 1498  
e-mail: [info@radioholland.nl](mailto:info@radioholland.nl); Internet: [www.radioholland.nl](http://www.radioholland.nl)

## System overview

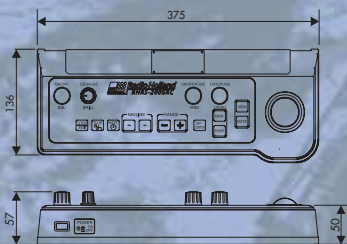


## Dimensional drawings

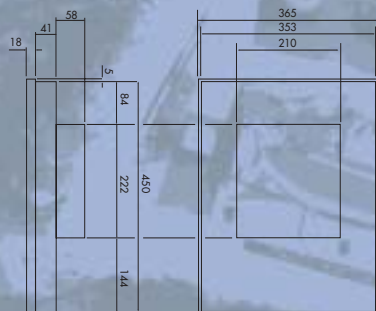
### Scanner



### Operating Unit



### Display



### Mountingbracket display



Measurements in mm

## Technical data for RHRS2005RC TFT

radiator type  
radiator length

horizontal beamwidth  
vertical beamwidth  
rotation speed  
wind load

frequency  
peak output power  
pulse repetition rate (PPR)

intermediate frequency  
band width

display  
presentation mode  
distance accuracy  
accuracy  
echo trails

off-centering

radar mapping

interfaces (inputs)

interfaces (outputs)

ambient temperature

humidity  
vibrations  
supply voltage  
power consumption  
standard delivery

optional

### Scanner unit

slotted waveguide array  
2570 mm (XN14AF), 2250 mm (XN22AF),  
2040 mm (XN20AR)  
0.95° (XN14AF), 1.0° (XN22AF), 1.2° (XN20AR)  
25°  
24 rpm  
relative wind speed up to 100 knots for a rotation  
speed of 24 rpm

### RF Tranceiver

9410 MHz ± 30 MHz (X band)  
4 KW  
0.04 μs / 4000 Hz (0.25-2 km), 0.18 μs / 2500 Hz  
(2-16 km), 0.5 μs / 1000 Hz (4-64 km)  
60 MHz, linear amplified  
25 MHz for short (0.04 μs) and medium-long (0.18  
μs) pulses. 3 MHz for long (0.5 μs) pulses.

### Display unit

18.1" TFT display effective diameter 270 mm  
relative head up  
better than the usual distance of 10 m.  
distance, 1% or 10 m; bearing: accuracy EBL 1°  
relative trails every 2 antenna revolutions, for true  
trails course and speed data are required  
the origin of the radar image can be reduced by  
33% of the range  
there are 1,500 points available for marking buoys  
and navigation lines  
ship's course: (AD-10 format or NMEA-0183  
IEC61162)  
ship's speed, ship's position, depth, date/time  
(NMEA-0183 IEC1162)  
Rate of turn indicator (20 mV/degree)  
ROT alarm  
rudder deviation (1 - 100 mV/degree)  
remote display (HL, Azimuth, video, trigger) SXGA  
video output\*  
NMEA (\$RARSD, \$RAOSD)  
\* video buffer board option necessary

### Environmental conditions

antenna unit: -25 °C to +70 °C  
display box: -15 °C to +55 °C  
relative humidity 93% ± 2% or less. At +40 °C ± 3%.  
tested acc. to IEC 606945 issue 03  
20 - 40 V DC  
approx. 230 W max.  
antenna unit, scanner XN14A (8 feet), display &  
processorbox, control unit with 5 metres of cable  
rectifier RU1746B for 115/230 V AC, transformer  
RU1803 for 440 V AC, scanner XN22AF (7 feet),  
RGBV video buffer, course sensor PG1000, exten-  
sion cable for the control unit, 36/42 rpm scanner  
motor

Dealer

subject to changes