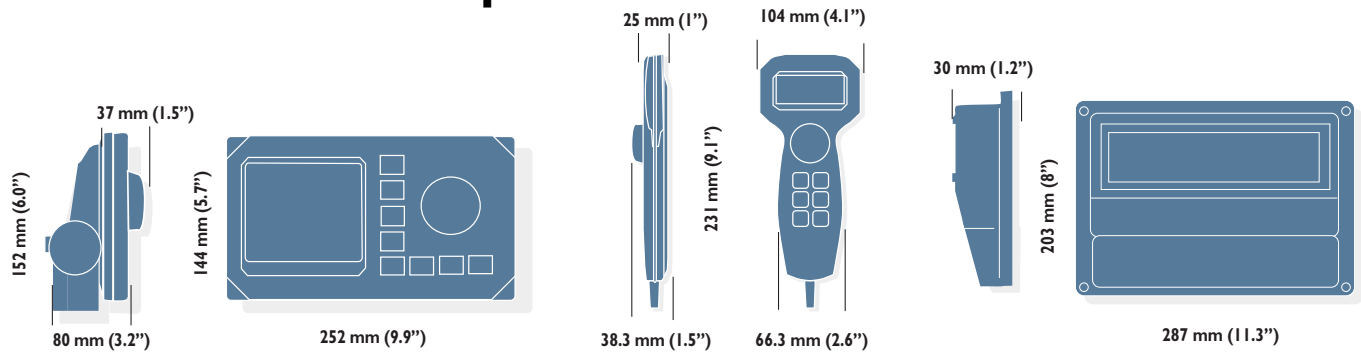


Simrad AP50 Technical Specifications



AP50 Autopilot System

Boat size and type: Up to 200 feet, power

Steering system types: Hydraulic, mechanical, solenoids

Inter-unit connection: RobNet network or two-wire supply/data

System ON/OFF: From control units/master unit

Supply voltage: 10-40VDC

Power consumption: Dependent on system configuration (See 1.4 Junction Unit)

EMC protection: EN60945: 1996-II

Performance: IMO MSC(64)67, ISO 11674:2000(E)

Rate of turn: Within $\pm 10\%$ of preset value or $3^\circ/\text{min}$. (Ref. ISO 11674: 4.3.7)

Heading indication error: $< 0.5^\circ$ (Ref. ISO 11674: 4.3.5)

Heading stability: Within $\pm 1^\circ$ (Ref. ISO 11674: 4.3.13)

Automatic Steering control:

Rudder Drive: Proportional pump or solenoid on/off

Parameter selection: Automatic with manual override

Sea state control: Adaptive sea state filter

Language selection: English, German, French, Spanish, Italian, Dutch, Swedish, Norwegian.

Electronic Interface:

Navigation interface: Standard (NMEA 0183)

NMEA input/output ports: Max. 6 (see Junction units and NI300X specifications) Refer to NMEA Sentences table page 64 for data.

Heading output: Anritsu and Furuno radar display (clock/data)

Heading sensors: Gyrocompass, Fluxgate compass, Magnetic compass, NMEA Compasses, Transmitting Heading Device (THD)

Course selection: Rotary course knob and buttons

Alarms: Audible and visual, external optional Compass difference, off heading, system failures, overload

Steering modes: STANDBY, Non-follow-up, Follow-up, AUTO, AUTO-WORK, NAV, NAV-WORK

Special turn modes: DODGE, U-Turn, C-Turn ($5-360^\circ/\text{min}$.)

System selector autopilot/main

steering system: Potential free contact

AP50 Autopilot

Dimensions: See drawing above

Weight: 0.9 kg (2.0 lbs.)

Material: Epoxy coated aluminum

Supply: 10-40VDC via RobNet

Power consumption: 3 W

Environmental Protection: IP56 (when panel-mounted)

Safe distance to compass: 0.35 m (1.0 ft.)

Color: Black

Temperature:

Operating: -25 to $+55^\circ\text{C}$ (-13 to $+130^\circ\text{F}$)

Storage: -30 to $+80^\circ\text{C}$ (-22 to $+176^\circ\text{F}$)

Display:

Type: Backlit LCD matrix

Resolution: 160 x 128 pixels

Illumination: Adjustable in 10 grades

Mounting: Panel mount or bracket mount (optional)

Cable: RobNet cable 15 m (49 ft.) with one male connector

AP51 Handheld Autopilot

Dimensions: See drawing above

Weight: 0.57 kg (1.25 lbs.)

Material: PC-ABS

Supply: 10-40VDC via RobNet

Power consumption: 3 W

Environmental Protection: IP56

Safe distance to compass: 0.35 m (1.0 ft.)

Color: Black

Temperature:

Operating: -25 to $+55^\circ\text{C}$ (-13 to $+130^\circ\text{F}$)

Storage: -30 to $+80^\circ\text{C}$ (-22 to $+176^\circ\text{F}$)

Display:

Type: Backlit LCD matrix

Resolution: 80 x 32 pixels

Illumination: Adjustable in 10 grades

Mounting: Handheld or placed in a fixed, bracket-mount

Cable: 7m (23 ft.) RobNet cable with air tube

Junction Units

Dimensions: See drawing above

Weight:

J50 1.3 kg (2.9 lbs.)

J50-40 2.8 kg (6.2 lbs.)

Material: Anodized aluminum and black ABS cover

Supply voltage: 12-32 VDC $-10\%/+30\%$

Reverse voltage protection: Yes (not J50-40)

Environmental Protection: IP22

Power consumption: 5 Watt (electronics only)

Clutch/bypass load: Max 1.5 Amps

Motor/solenoid drive: J50: 10 A continuous, 20 A for 5 seconds

J50-40: 20 A continuous, 40 A for 5 seconds

Vbat output: 1.5 A (automatic fused)

Safe distance to compass: 0.5 m (1.6 ft.)

Material: Anodized aluminum and black ABS cover

Temperature range:

Operation: -20 to $+55^\circ\text{C}$ (-13 to $+130^\circ\text{F}$)

Storage: -30 to $+80^\circ\text{C}$ (-22 to $+176^\circ\text{F}$)

Heading Sensor input: Composite pulse width modulated

Rudder feedback input: Frequency signal, 3400 Hz, 20 Hz/degree

Rudder feedback units: RF300S or RF45X

NMEA input/output ports: Two

External Alarm: Open collector 0.5A

Mounting: Bulkhead-mount

System selector Autopilot/Main steering system

Potential free contact

Heading output: Anritsu and Furuno radar display (clock/data)

Specifications subject to change without notice