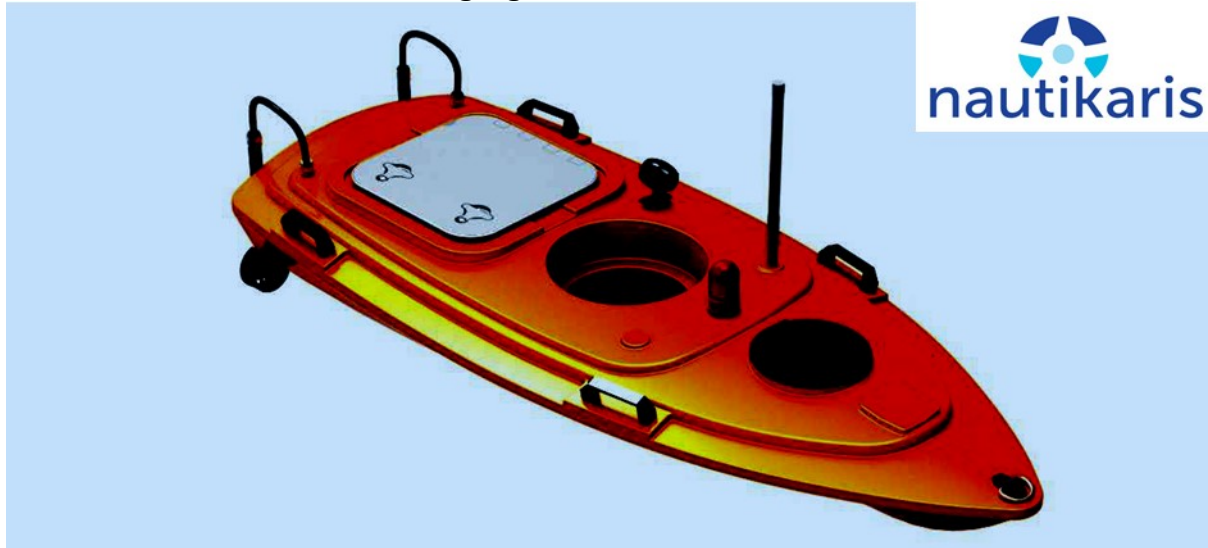


## NautiQ 652 USV for Sonar Imaging

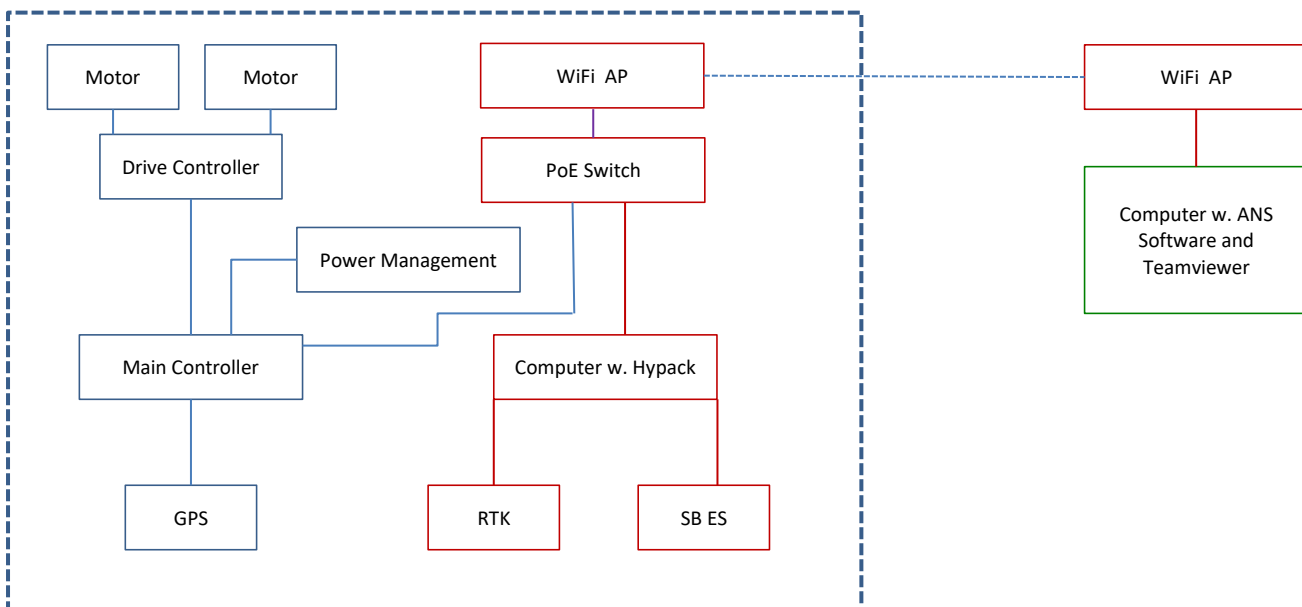


### Consisting of:

1. Hull (PE)
2. Remote controller (2.4Ghz)
3. Hatch
4. Propulsion drive
5. Handle(black)
6. Bracket
7. Waterproof flash light
8. Waterproof switch
9. Watertight antenna

### Autonomous navigation system:

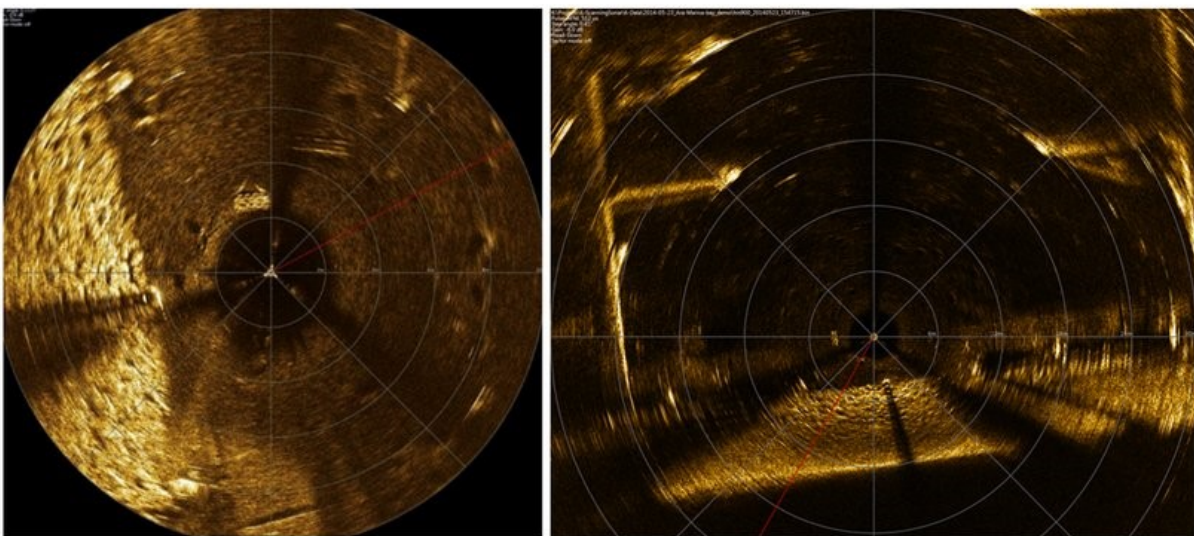
1. Software
2. Main control box
3. Driving box
4. GPS module
5. Futaba Remote controller (2.4Ghz - EU)



## Scanning Sonar technical specifications:

### Technical Specification:

Pulse Type	Chirp,CW
Operating Frequency	~900kHz
Beam Pattern	Fanbeam (2.5°H /25°V)
Range	from 30cm, up to 60m
Range Resolution	7.5 mm @ 100kHz Sampling Frequency
Scanning Angle	Selectable up to 360°
Scan Angle Resolution:	0.1125°, 0.225°, 0.45°, 0.9°, 1.8°
Scan Speed:	4 sec / 360° @ 5 m, Scanning Resolution 0.9° 6.4 sec / 360° @ Range 10m and Scanning Resolution 0.9° 40 sec / 360° @ Range 60m and Scanning Resolution 0.9°
Transmit Pulse Length	500us (chirp), 10-100us (CW)
Interface	RS232/RS485 up to 3 Mbaud
Power Requirements	12-60 VDC, 4W max
Cable max length	300m @2 Mbaud, 1 km @ 115200 baud
Connector	MC16M(Subconn) or pigtail
Operating	1000m or 2000m
Housing:	Aluminum, Hard Anodized
Dimensions:	D66mm x H76 mm
Weight:	580 g, 350 g (in air/ in water)
Light version:	410g/190g



## Computer:



- Intel Gen 6 Core i7-6600U 2.6GHz up to 3.4GHz
- 2 x DDR4 2133 MHz SO-DIMM 16GB
- 2 x RJ45 Ports for GbE
- 2 x USB 3.0 Ports, 2 x USB 2.0 Ports
- 4 x RS-232 (2 with RS-422/485 (Auto Direction Control))
- 2 x 512GB SSD
- 9V - 36V DC Power Input
- 40°C ~ 70°C Operating temperat

## Wireless Outdoor Access Point



- IEEE 802.11n wireless outdoor solution, backward compatible with 802.11b/g
- 802.11n 2T2R MIMO data rate up to 300Mbps
- High performance and low maintaining cost for video surveillance
- Wireless QoS (WMM) for video precedence transmission
- Internal 9dBi directional antenna (Vertical 60 ° , Horizontal 70 ° )
- Up to 2KM Wireless coverage
- Supports Base Station, Point to Point, Point to Multiple Point connectivity
- Supports Spanning Tree Protocol, IGMP Snooping, SNMPv3, NTP, DHCP Server, Router mode
- Advanced security system by WPA-PSK(TKIP), WPA2-PSK(AES)
- Built-in 24VDC PoE, to be powered through Ethernet cable
- IP55, -20-70°C operating temperature

## PoE Switch

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- Four 10/100 TX PoE plus two 10/100/1000TX uplink ports
- Vehicle PoE: DC 12V~24V input, deliver 4 port PoE @48V
- 802.3af compliant PoE: Total power budget is 60W\* with max. 15.4W per port
- Two gigabit Ethernet ports for larger uplink bandwidth of surveillance
- Support QoS for optimizing video and VoIP stream
- Fault relay for active warning of port failure
- 25~60oC operating temperature