

aselsan

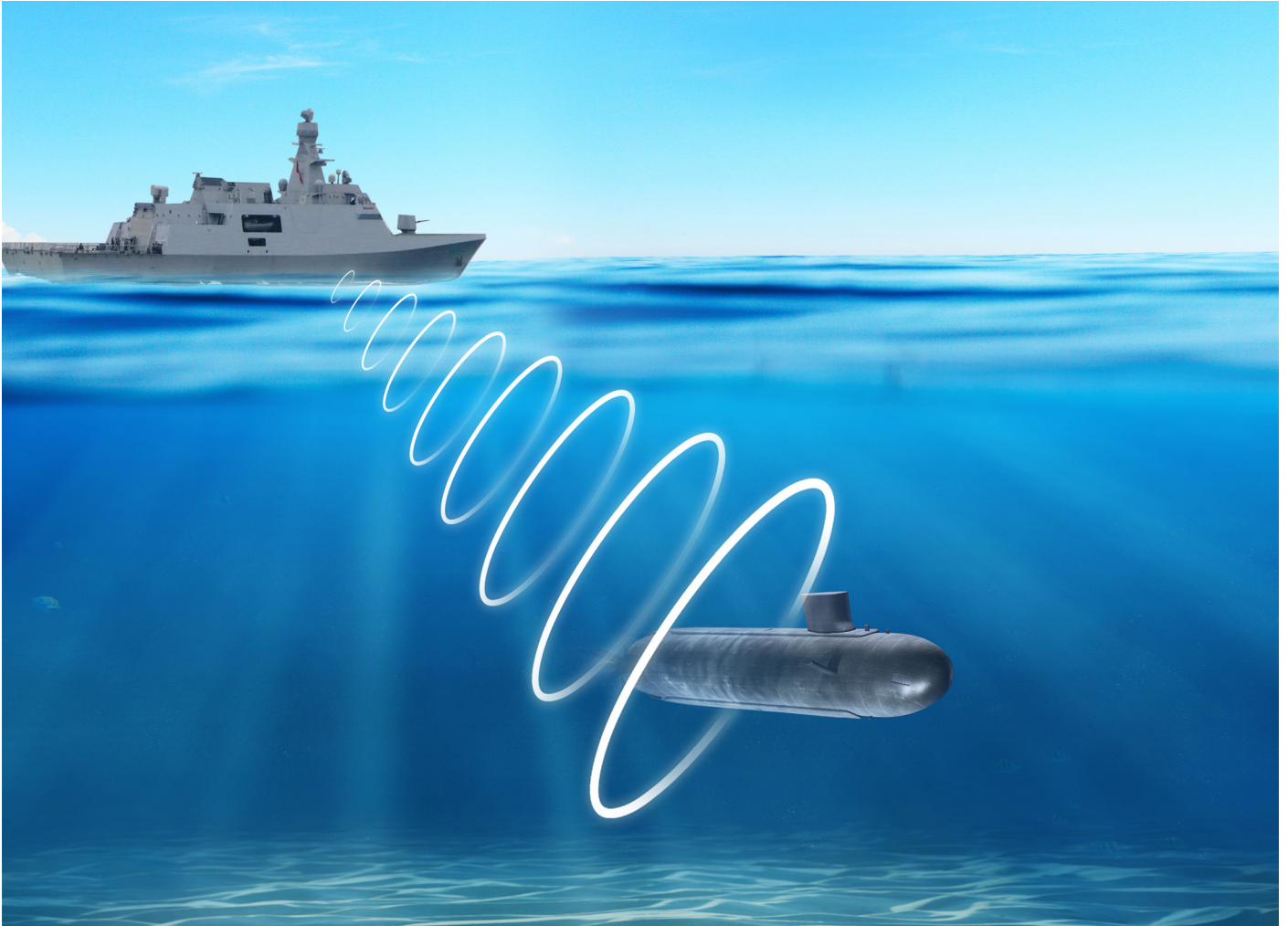


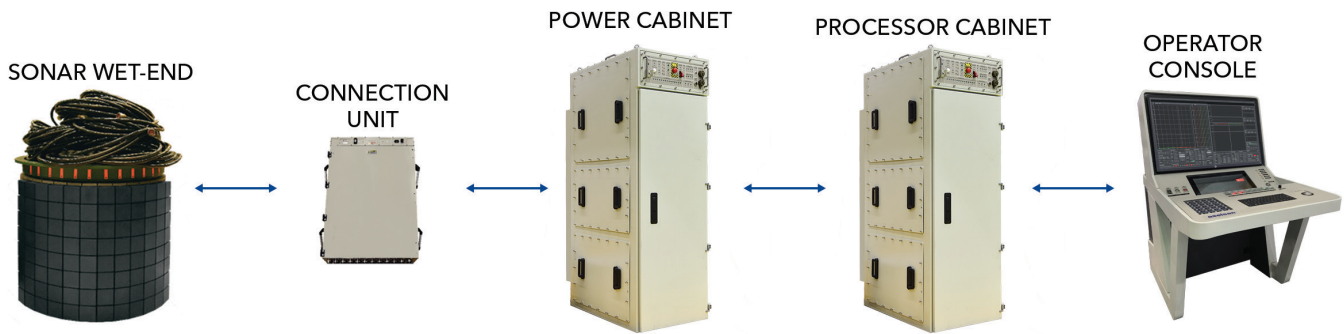
FERSAH

HULL MOUNTED ASW SONAR

ASELSAN FERSAH Hull Mounted ASW Sonar is a mid-frequency anti-submarine sonar with high source level and array directivity. The system has active and passive ASW modes, in addition to its Mine Like Object Avoidance (MAS) mode.

ASELSAN FERSAH Hull Mounted ASW Sonar has detection, tracking and analysis capabilities both in active and passive modes with state of the art signal processing techniques.





FERSAH

Hull Mounted ASW Sonar

System Configuration

ASELSAN FERSAH Hull Mounted ASW Sonar consists of 5 units which are Sonar Wet-End, Connection Unit, Power Cabinet, Processor Cabinet and Operator Console.

Sonar Wet-End is used for transmission/reception (T/R) of the acoustical signals to/from the environment. It is composed of 36 staves that are arranged in cylindrical fashion.

Connection Unit is used for analog connection between Sonar Wet-End and Processor Cabinet.

Power Cabinet includes high power voltage supplies.

Processor Cabinet includes signal processing algorithms, signal processing software, power amplifier electronics, front-end conditioning filter, pre-amplifiers and analog-digital converter (ADC) electronics.

Operator Console is the human machine interface of ASELSAN FERSAH Hull Mounted ASW Sonar. It consists of workstation, display, keyboard, programmable display keys, speaker and headset with microphone

Environmental Conditions

Sonar Wet-End

High Storage Temperature	MIL-STD-810F, Method 501.4, Procedure I
Low Storage Temperature	MIL-STD-810F, Method 502.4, Procedure I
High Operating Temperature	MIL-STD-810F, Method 501.4, Procedure II
Low Operating Temperature	MIL-STD-810F, Method 502.4, Procedure II
Shock	MIL-S-901 D Shipboard Shock Test Grade-B
IP Proof	IP68

Sonar Dry-End (Except Operator Console)

High Storage Temperature	MIL-STD-810F, Method 501.4, Procedure I
Low Storage Temperature	MIL-STD-810F, Method 502.4, Procedure I
High Operating Temperature	MIL-STD-810F, Method 501.4, Procedure II
Low Operating Temperature	MIL-STD-810F, Method 502.4, Procedure II
Humidity	MIL-STD-810F, 507.4
Vibration	MIL-STD-810F, Method 514.5, Procedure I
Shock	MIL-STD-810F, 516.5
EMI/EMC	MIL-STD-461E
IP Proof	IP23

Technical Specifications

- Detection and tracking of 32 targets in active mode
- Detection and tracking of 8 targets in passive mode
- Horizontal Coverage
 - ASW Mode: 360°
 - MAS Mode: 90°
- Active Sonar Frequency: 6.7 kHz, 7.5 kHz and 8.4 kHz
- Active Sonar ASW Mode: OMNI, SRDT, ARDT, TRDT, MCC
- Passive Sonar Frequency Band: 3 kHz - 12 kHz
- Pulse Type: CW, FM and COMBO (CW+FM)
- Pulse Length
 - CW: 16, 64, 128, 256 ms
 - FM: 8, 16, 64, 128, 256 ms
- Range Scale: 2250, 4500, 9000, 18000, 36000 m
- Electrical Supply Voltage
 - Processor Cabinet: 115 VAC, 60 Hz, phase 1
 - Power Cabinet: 115 VAC, 60 Hz, 1 ϕ and 440 VAC, 60 Hz, phase 3
 - Operator Console: 115 VAC, 60 Hz, phase 1
 - Connection Unit: 115 VAC, 60 Hz, phase 1

General Specifications

- Open architecture and modular design
- Modern signal processing algorithms
- Modern human machine interface
- Onboard training simulator
- Rugged design
- Compatibility with military standards
- Standalone working capability
- Integration to Combat Management System
- Capability of Built-in Test (BIT)
- Water cooling cabinet structure
- Recording acoustic data
- Data transfer to portable storage devices.
- Dummy Load Electronics
- Raw Data Recording and Replay
- Self Noise Monitoring and Recording
- Screenshot/Video Recording and Replay
- Printing Capability