





# **PRODUCT OVERVIEW**

- > HVR-600 is HMAP's best and most stable voyage data recorder to date. It is the fruition of nearly two decades of endeavor in the challenging field of maritime black boxes and embodies the wealth of experience gained from VDRs fitted in thousands of seagoing vessels around the World.
- HVR-600 fully meets the requirements of IMO A861(20), MSC 333(90), IEC 61996-1-2013, IEC91996-2, IEC 60945 and MSC.494(104)

# PRODUCT FEATURES



STABLE & RELIABLE



EASY TO INSTALL



SMALL & COMPACT



FLEXIBLE



ADAPTABLE



**SECURE** 

#### STABLE & RELIABLE

The operating system is embedded with software applications that are tried and true, bug-free.

#### **EASY TO INSTALL**

Distributed architecture provides for convenience in situating the single elements close to recorded sensors and devices

#### SMALL & COMPACT

Easily fits into even the most cramped wheelhouse environments

#### > FLEXIBLE

Independent image, serial data, non-standard data acquisition modules, flexible configuration depending on demand, reduces cost effectively.

#### ADAPTABLE

Can be configured with several data acquisition modules with several accessible signals to meet the recording demands of various ships

#### > SECURE

The data stored in the HVR-600 is tamper-proof, it is not possible to alter or delete it.



# TECHNICAL SPECFICATIONS

#### MAIN UNIT (MU)

Power input: AC1101220V, 50-60Hz; DC 24V

Consumption: <150W</p>

Reserve battery: 7AH for not less than 2hours usage

Inputs: Audio: 5x audio channels

8x Microphones input

2x VHF audio input

Ethernet: 10x Ethernet channels(100MBS) for ECDIS, RADAR etc

Integral Long Term Recording Storage Medium

Dimensions (LxWxH): 600x450x235mm

Weight :18kg

Installation: Wall or bulkhead mounting

IPProection: IP22

➤ Working temperature: -15°C - 55°C

#### LONG-TERM DATA RECORDING UNIT

Integrated in the Main Unit

Memory capacity: 512GB

Operating system: Linux OS

Recording Speed: 100MBPS

Working temperature: -15°C - 55°C

# FLOAT-FREE DATA RECORDING CAPSULE - NEW! COMPLIANT WITH IMO Res. MSC.494(104)

> Recording time: not less than 48h

Memory Capacity: 32GB Operation System: Linux OS

Operation System: Linux OS

Standards: IMO A 662(16), IEC61996-2 (2013), IMO Res. MSC.494(104)

Release mechanism: Auto-release when 4m underwater

COSPAS-SARSAT EPIRB: Complies with IMO Res A 810(19

#### **SERIAL DATA ACQUISITION UNIT**

24xl EC61162serial data input

Selectable Baud rate

Dimension (LxWxH): 360x260x150mm

Weight: 8kg

► IP Protection: IP22

Working temperature: -15°C - 55°C

#### **ASSEMBLY MICROPHONE (AM)**

Frequency Range: 100Hz-12kHz

Installation: Flush mounting (Indoor) or Wall Mounting

IP Protection: IP22 for indoor units and IP56 for outdoor units

Integrated built-in self-test function

High clarity and quality sensor

Dimension (LxWx H): 115x67x33.7 mm (indoor) 139x81x 64 mm (outdoor)

Weight 0.4kg (indoor) 0.5kg (outdoor)

Working temperature: -15°C - 55°C

> IEC61097-2; IEC61096-7andITU-RM.633-3:2004 regulations.

> Watertight: up to 10M underwater

Drop height: 20 meters

IP Protection: IP56

Working temperature: -15°C - 70°C

#### **OPERATION UNIT (OPU)**

Display: High-definition touch screen LCD, (800x480 Pixel)

Human-Machine Interface: User friendly interface, displays all the warnings and alarms

Data Back Up function

Dimension (LxWxH): 166.4 x164.4x70mm

Weight: 0.5kg

Installation: Flush mounting

► IP Protection: IP22

Working temperature: -15°C - 55°C

#### FIXED PROTECTIVE DATA RECORDING CAPSULE

Recording time: not less than 48h

Memory Capacity: 32GBOperation System: Linux OS

Standards: IEC61996-2 (2013)

Dimension (DxH): <t:>180x240(mm)

Weight: 17kg

Working temperature: -25°C - 70°C

#### **VIDEO ACQUISITION UNIT**

Number of Video Channels: 4x video channels for VGA inputs. High definition up to 1920x1200x60Hz

installation of unit can be located near to image source

Dimension: 360x260x150mm

Weight: 8kg

➤ IP Protection: IP22

Working temperature: -15°C - 55°C

#### **NON-STANDARD DATA ACQUISION UNIT**

24xl EC61162serial data input

Selectable Baud rate

Dimension (LxWxH): 360x260x150mm

Weight: 8kg

▶ IP Protection: IP22

➤ Working temperature: -15°C - 55°C

#### STANDARD CONFIGURATION

MAIN UNIT (HLD-MU600)

OPERATION UNIT (HLD-OPU600)

> FIXED PROTECTIVE DATA RECORDING CAPSULE (HLD-PDC600)

FLOAT-FREE DATA RECORDING CAPSULE (HLD-FFC680A)

STORAGE UNIT ADAPTER BOX (HLD-CJB600)

VIDEO ACQUISITION UNIT (HLD-VAU600)

SERIAL DATA ACQUISITION UNIT (HLD-DAU600)

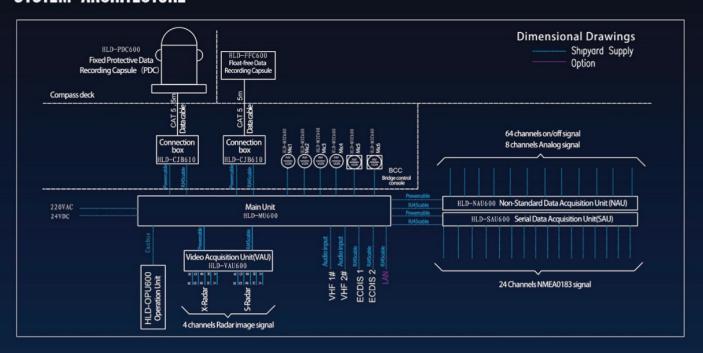
NON-STANDARD DATA ACQUISITION UNIT (HLD-NAU600)

MICROPHONE INDOOR (HLD-MIC600)

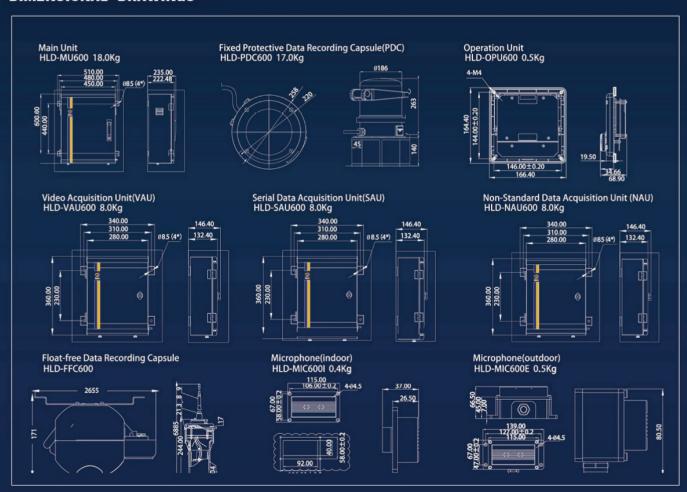
MICROPHONE OUTDOOR (HLD-MIC610)

PLAYBACK SOFTWARE

# SYSTEM ARCHITECTURE



### DIMENSIONAL DRAWINGS



## **HMAP PTE LTD**

Address: 1 Sunview Road, Eco-Tech@Sunview, #08-43 Singapore 627615

Tel: +65 6377 3096

Email: sales@hmapsg.com / service@hmapsg.com

Website: www.hmapsg.com