

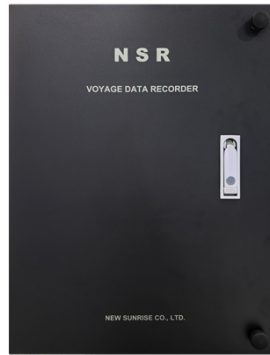
S-VDR (Simplified Voyage Data Recorder)

NVR-9000S

- Conform to new IMO regulation
- NSR's own FFC and FPC used
- Real monitoring software available for easy check
- Flexible configuration for either VDR or S-VDR
- Linux O/S used in S-VDR system
- Large size color LCD with touch screen operation
- Data interface to BAM System
- Type approval with DNV (MED) and CCS



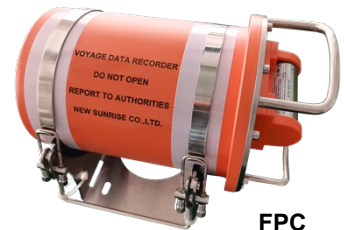
DAU



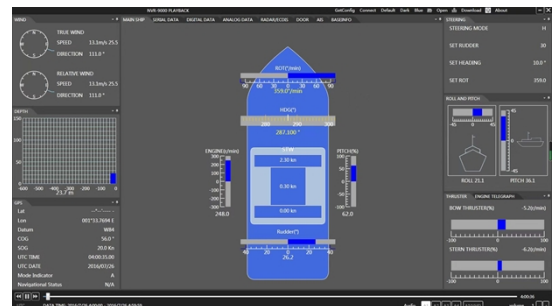
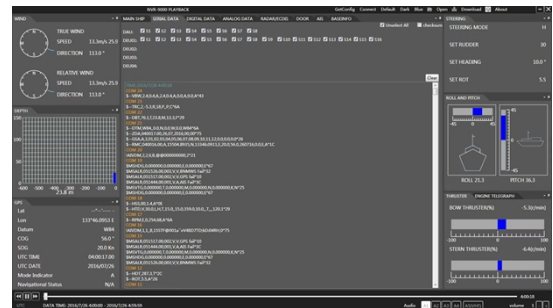
FFC



RAU



FPC

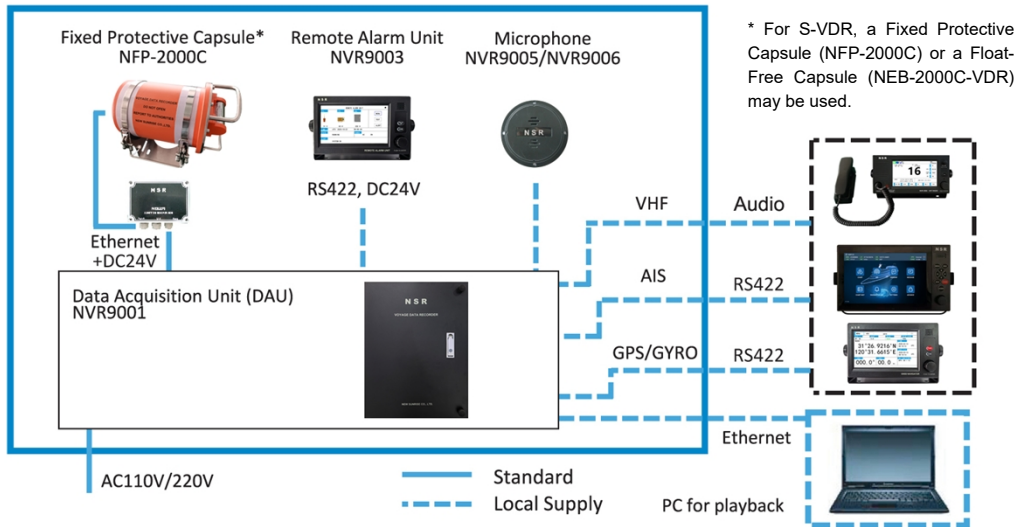


NVR-9000S S-VDR is designed to comply with the latest IMO regulation MSC.493 (104), IMO MSC.302 (87), and IEC 61996-2.

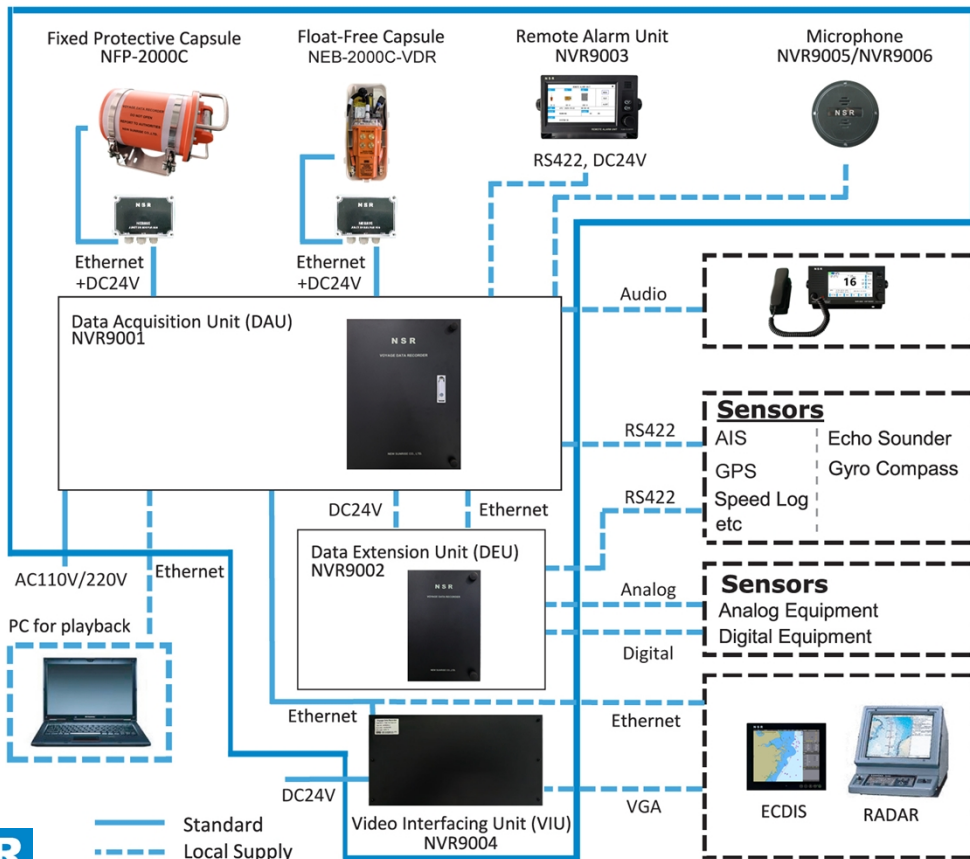
- Float-free Capsule (FFC) or Fixed Protective Capsule (FPC) can be selected as the storage medium.
- Both FFC and FPC has the capacity of 64 GB each.
- Data Acquisition Unit (DAU) is fitted with LRU (64GB SSD).
- 8 ch of serial ports are available in DAU.



NVR-9000S S-VDR SYSTEM DIAGRAM (STANDARD)



NVR-9000S S-VDR SYSTEM DIAGRAM (EXTENSION)



SPECIFICATIONS

Data Acquisition Unit (DAU)	Interface	Ethernet IEC 61162-450	4 ch
		Serial IEC 61162-1/2, RS422	8 ch
		VHF Audio	2 ch
		Microphone	8 ch
		Remote Alarm Unit	1 ch
		USB	1 ch
	DC 24V output	Remote Alarm Unit (RAU)	1 ch
		Fixed Protective Capsule (FPC)	1 ch
		Float-Free Capsule (FFC)	1 ch
	LRU	Memory	64 GB
		Recording Duration	min 48 hours
Fixed Protective Capsule (FPC) *	Reserve Battery	Battery Capacity	min 2 hours
		Memory	64 GB
		Recording Duration	min 48 hours
		Beacon Battery Capacity	min 90 days
Float-Free Capsule (FFC) *		Beacon Battery Life	3 years
		Memory	64 GB
		Recording Duration	min 48 hours
		Battery Capacity	min 168 hours
		Battery Life	5 years
Data Extension Unit (DEU)	Interface	Analog Input	8 ch
		Digital Input	64 ch
		Serial IEC 61162-1/2, RS422	16 ch
		Ethernet	1 ch
Video Interface Unit (VIU)	Interface	VGA	1-2 ch
		Ethernet	1-2 ch
Remote Alarm Unit (RAU)	Interface	Serial IEC 61162-1/2, RS422	1 ch
POWER SUPPLY			
Data Acquisition Unit (DAU)	AC110V/220V, 0.5~1.5A, 50/60Hz		
Data Extension Unit (DEU)	DC24V, 0.5A		
Video Interface Unit (VIU)	DC24V, 0.3A		

* FPC or FFC is selected.

EQUIPMENT LIST

Standard

1	Data Acquisition Unit (DAU)	NVR9001	1 unit	5	Indoor Microphone Unit (IMU)	NVR9005	4 units
2	Data Extension Unit (DEU)	NVR9002	0 unit	6	Outdoor Microphone Unit (OMU)	NVR9006	2 units
3	Remote Alarm Unit (RAU)	NVR9003	1 unit	7	Fixed Protective Capsule (FPC) *	NFP-2000C	1 unit (FPC or FFC)
4	Video Interface Unit (VIU)	NVR9004	0 unit	8	Float-Free Capsule (FFC) *	NEB-2000C-VDR	

* NEB-2000C-VDR/NFP-2000C is supplied together with a Junction Box (NEB205) and cable (30m).

Options

1	Data Extension Unit (DEU)	NVR9002
2	Video Interface Unit (VIU)	NVR9004
3	Indoor Microphone Unit (IMU)	NVR9005
4	Outdoor Microphone Unit (OMU)	NVR9006

※ Specifications subject to change without notice

1	Data Acquisition Unit (DAU)	NVR9001	IP22	15.2 kg	
2	Data Extension Unit (DEU)	NVR9002	IP22	5.2 kg	
3	Remote Alarm Unit (RAU)	NVR9003	IP22	1.6 kg	
4	Video Interface Unit (VIU)	NVR9004	IP22	2.5 kg	
5	Indoor Microphone Unit (IMU)	NVR9005	IP22	0.1 kg	
6	Outdoor Microphone Unit (OMU)	NVR9006	IP56	0.2 kg	
7	Fixed Protective Capsule (FPC)	NFP-2000C	Note 1	16.5 kg	
8	Float-Free Capsule (FFC)	NEB-2000C-VDR	Note 2	3.5 kg	

Note 1: Watertight at a depth of 6000m for at least 24 hours.

Note 2: Watertight at a depth of 10m for at least 5 min.