

SDU – Navigation Distribution Data Unit



Main functions:

SDU manages and distributes information delivered by the Inertial Navigation System (INS) to authorized users

- Navigation information
- Status information

Information are received in NAV1 format and delivered to users in NAV1 and NMEA0183 formats.

SDU can receive information delivered by two INS (one pilot and one back-up).

For redundancy, configuration with two SDU is possible.

Architecture:

SDU consists of a ruggedized housing, including:

- A front panel door fitted with:
 - 15" LCD colour touch screen,
 - On/Off switch,
 - EMC seal.
- Tray containing
 - Power distribution ramp,
 - CPCI plug-in rack,
 - CPU MEN F19P board,
 - 8-link RS422/RS485 board,
 - AC/DC 250W power supply module,
 - SDU interface rack,
 - Terminal connector blocks.

Exploitation modes:

SDU can be controlled either locally with the touchscreen on its front panel or remotely with a dedicated System Control Interface (SCI).

Anytime, user can manage:

- The INS used for input information in case of multiple available INS (one pilot and one back-up for instance)
- Distribution by only one SDU in case of 2 x SDU configuration.

Features:

The colour touchscreen can be used with gloves.

Thanks to an ergonomic HMI, the user can display operational status of SDU and select inputs / outputs of SDU.

Up to five simultaneous users can be connected to each output of SDU.

SDU is attached by four shock absorbers on the back and can be handled by four hoist rings on the above panel.

Inputs:

- 1 x pilot INU
- 1 x back-up INU
- 1 x power supply

Outputs:

- Operational mode
 - 7 x normal NAV1 outputs
 - 3 x normal NMEA outputs
- Backup channels mode
 - 14 x NAV1 outputs (normal + backup)
 - 6 x NMEA0183 outputs (normal + backup)

User interfaces:

On the front panel, three LED show the system status:

- 2 x LED display INS status, with two possible colours
- 1 x LED displays SDU status, with five possible colours

Environmental data:

- Dimensions (excluding shock absorbers and hoist rings):
 - width: 600mm
 - depth: 450 mm
 - height: 700 mm
- Weight: 70 kg
- Power supply: 230 V, 50 Hz
- Power consumption: 102,5 VA
- Noise: 70dB +/- 3dB
- I/O: MIL-DTL-38999 series III connectors,

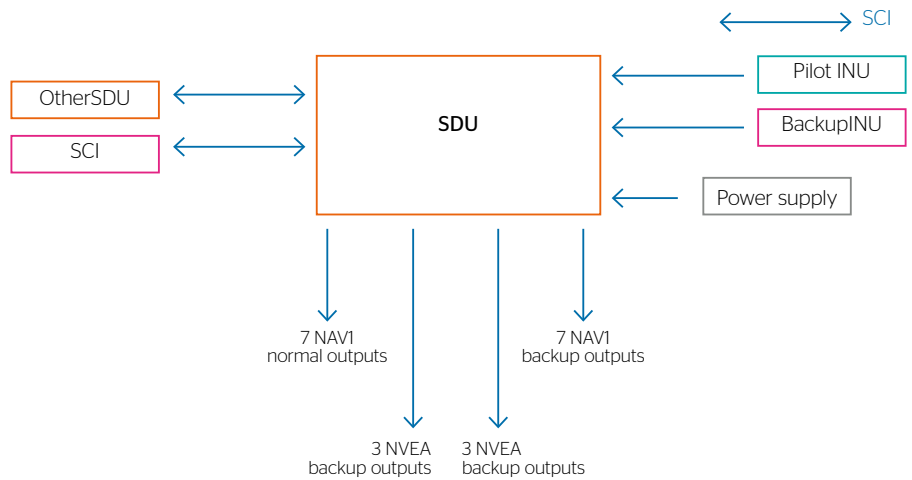
Standards compliance:

- IEC 60945

Product reference::

- NATO code: **F7582**
- Options: on demand

Designed and made in France by Atos.



According to 96/98/CE Marine Equipment Directive

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