Navigation & Tactical Data Distribution Unit (NavTac DDU)
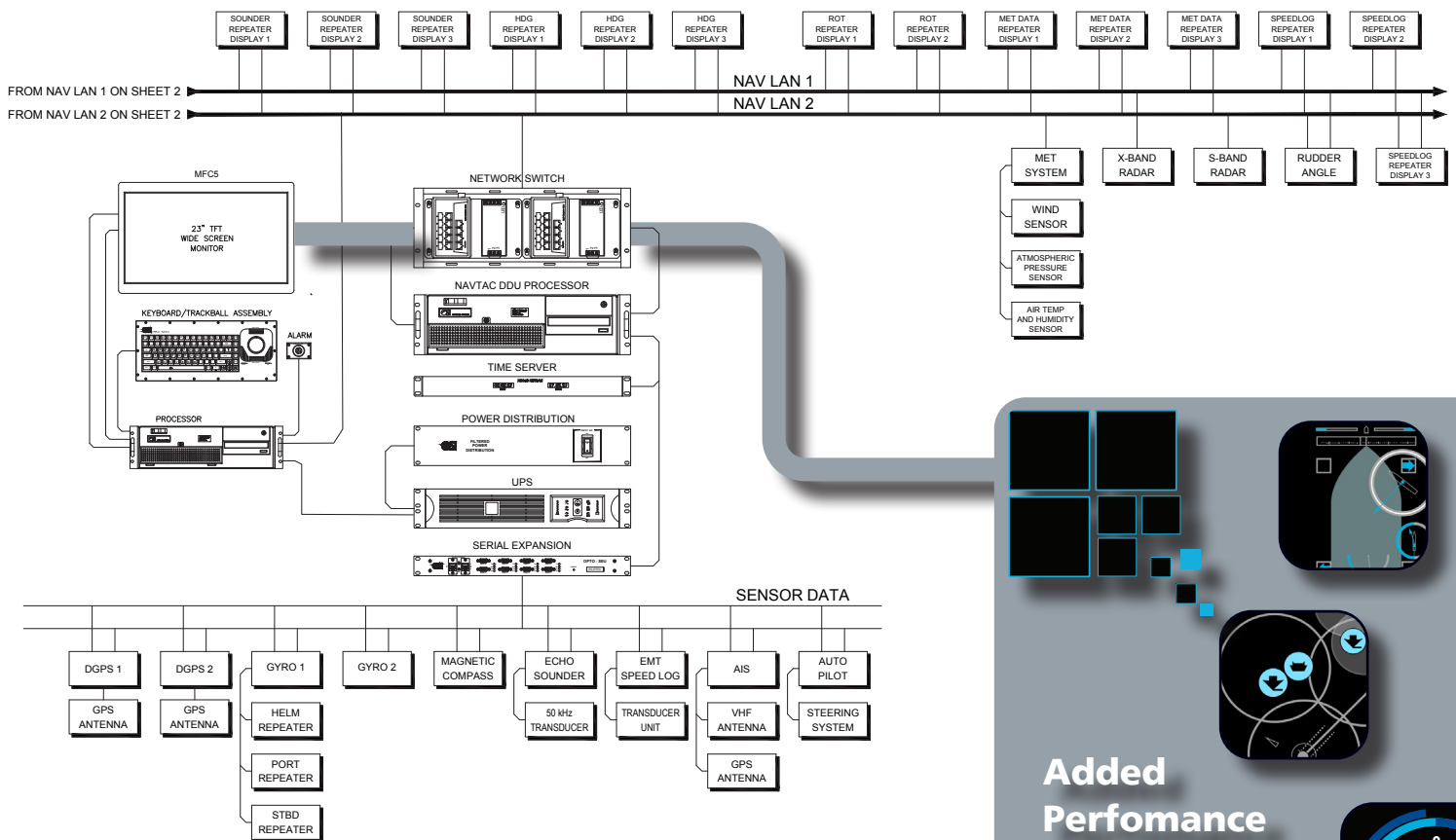
powered by **ecpins**

SOUNDER REPEATER DISPLAY 2

SOUNDER REPEATER DISPLAY 3

HDG REPEATER DISPLAY 1

HDG REPEATER DISPLAY 2

HDG REPEATER DISPLAY 3

ROT REPEATER DISPLAY 1

ROT REPEATER DISPLAY 2

MET DATA REPEATER DISPLAY 1

MET DATA REPEATER DISPLAY 2

MET DATA REPEATER DISPLAY 3

NETWORK SWITCH

NAVTAC DDU PROCESSOR

TIME SERVER

POWER DISTRIBUTION

UPS

SERIAL EXPANSION

MET SYSTEM

X-BAND RADAR

S-BAND RADAR

WIND SENSOR

ATMOSPHERIC PRESSURE SENSOR

AIR TEMP AND HUMIDITY SENSOR

GYRO 2

MAGNETIC COMPASS

ECHO SOUNDER

EMT SPEED LOG

AIS

AUTO PILOT

50 kHz TRANSDUCER

TRANSDUCER UNIT

VHF ANTENNA

STEERING SYSTEM

GPS ANTENNA

OSI's NavTac DDU, a sensor data distribution system designed for naval vessels

OSI Maritime Systems

With a history spanning over 20 years, OSI delivers advanced navigation and command and control systems to address the growing need for enhanced real-time situational awareness for military and security applications. OSI solutions include ECPINS®, ECPINS Warship, ECPINS Submarine, T-ACT (Tactical - Asset Control & Tracking), and INTS (Integrated Navigation & Tactical System).

OSI's NavTac DDU is a sensor data distribution system for naval vessels. The system is a plug-in based open architecture system, supporting data routing, distribution, data logging and message translation. Data can be routed from any input interface to one or more output interfaces, in any combination. Consoles become multifunctional, providing a variety of displays in one easy click.

NavTac DDU Built for the Military

Added Perfomance With OSI ECPINS Software Suite of Modules

Scalable Hardware

- Marine-grade or MIL-SPEC COTS hardware
- IMO certified as part of OSI's ECDIS and Radar solutions
- either single or dual NavTac DDU configurations available
- up to 32 serial ports
- up to 4 separate networks with unlimited clients
- Integrated Time Server
- Analog interface option
- Marine-grade UPS option

Interfaces

- Data Rates up to 100 Hz supported
- Latency and Jitter less than 1 ms
- Hardware Interfaces supported:
  - RS422/RS232
  - Ethernet
    - TCP/IP client or server
    - UDP, UDP Broadcast, UDP Multicast
  - Analog
    - Synchro
    - Stepper
    - Pulse
- Data Protocols supported
  - NMEA 0183 / IEC 61162
  - Binary

System Configuration

- Time Server
  - NTP server
  - IRIG A, B or E option
  - PPS output option
- Headless Configuration
    - Software runs on Windows Embedded
    - No mouse, keyboard or display needed

Open Architecture

- Sensor Data Translation performed by "plug-ins" which can be written by OSI or the customer - does not require changes to core software to add new interfaces
- Supports translation of any input data format to any output data format.

Web Administration

- Administration is via web interface for authenticated users
- logging of all incoming and outgoing data
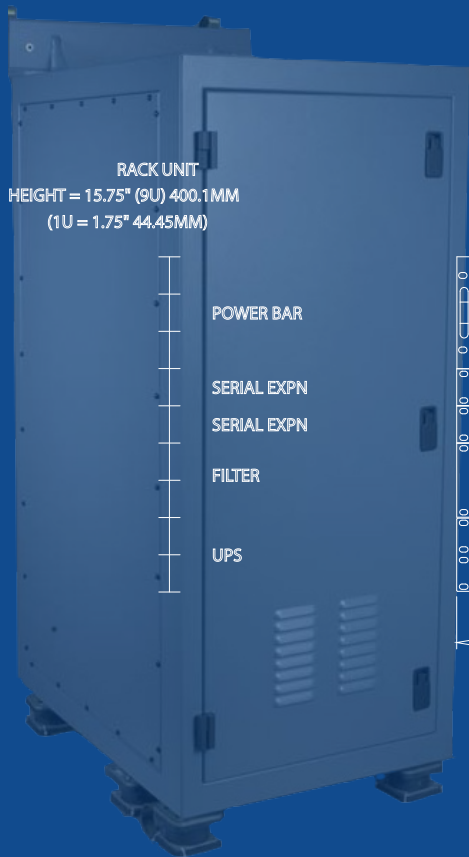- real-time diagnostics display
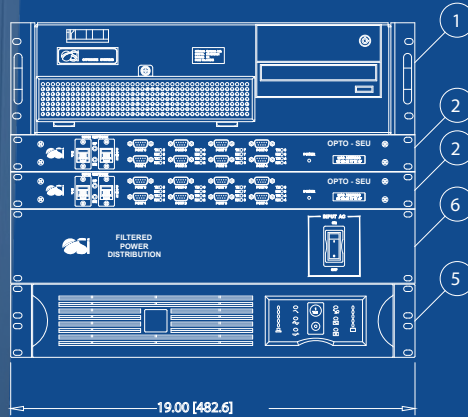- configuration of sensor interfaces

powered by **ecpins**

ECPINS® – Electronic Chart Precise Integrated Navigation System ECPINS-W and ECPINS-W Sub are International Maritime Organization (IMO) approved Electronic Chart Display and Information Systems (ECDIS) that surpasses the NATO WECDIS STANAG 4564 standard.
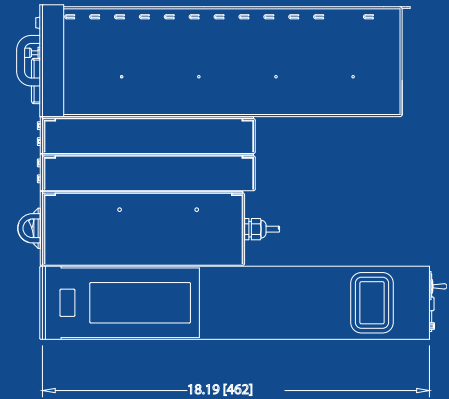
The NavTac DDU is based on OSI's ECPINS Message Translator (EMT) product in service on over 100 warships. Introduced in 2011, OSI has sold 34 NavTac DDU systems to 4 allied navies.

RACK UNIT
HEIGHT = 15.75" (9U) 400.1MM
(1U = 1.75" 44.45MM)

POWER BAR

SERIAL EXPN

SERIAL EXPN

FILTER

UPS

FRONT VIEW

OPTO - SEU

OPTO - SEU

FILTERED
POWER
DISTRIBUTION

INPUT AC

1
2
2
6
5

19.00 [482.6]

SIDE VIEW

18.19 [462]

Contact OSI for systems engineering and customized Integrated
Navigation & Tactical System (INTS) solutions and IPMS intergration.

24 Navies, more than 600 Ships
Fleetwide across Eight Navies
Eighteen Classes of Submarines

Belgium
Denmark
Germany
Ireland
Netherlands
Poland
Portugal
Sweden
Turkey
United Kingdom
Canada
United States
Egypt
Saudi Arabia
India
Malaysia
Singapore
Indonesia
Brazil
Chile
Australia
New Zealand
South Africa

Canada
4585 Canada Way, Suite 103
Burnaby BC V5G 4L6
Canada
Phone: +1 778 373 4600

www.osimaritime.com
info@osimaritime.com

Operational on surface vessels
Operational on subsurface vessels