

OCTOPUS Naval Subsystem for Remote Control and Configuration of Communication System

Naval Subsystem for Remote Control and Configuration of Communication System was designed and developed by KenBIT Sp. J. to meet the needs of the Polish Navy equipped with the Naval Integrated Communication System NEPTUN.

OCTOPUS is the basic component of the ship's control of internal and radio communication.

It allows for configuration of voice and data communication devices and visualization of components and commutation states. Thanks to scaling ability, the system may be installed on different types of naval vessels with any equipment configuration.

OCTOPUS visualizes the architecture of the communication system in the form of scalable diagram on which are shown the devices and physical connection among them. There are accessible also descriptions of the equipment, together with ports descriptions and device status.

This provides a quick orientation in the system operation and location of any faults. An appropriate form is associated with every device on the diagram. The forms provide the ability to configure some or all of the parameters of the devices.

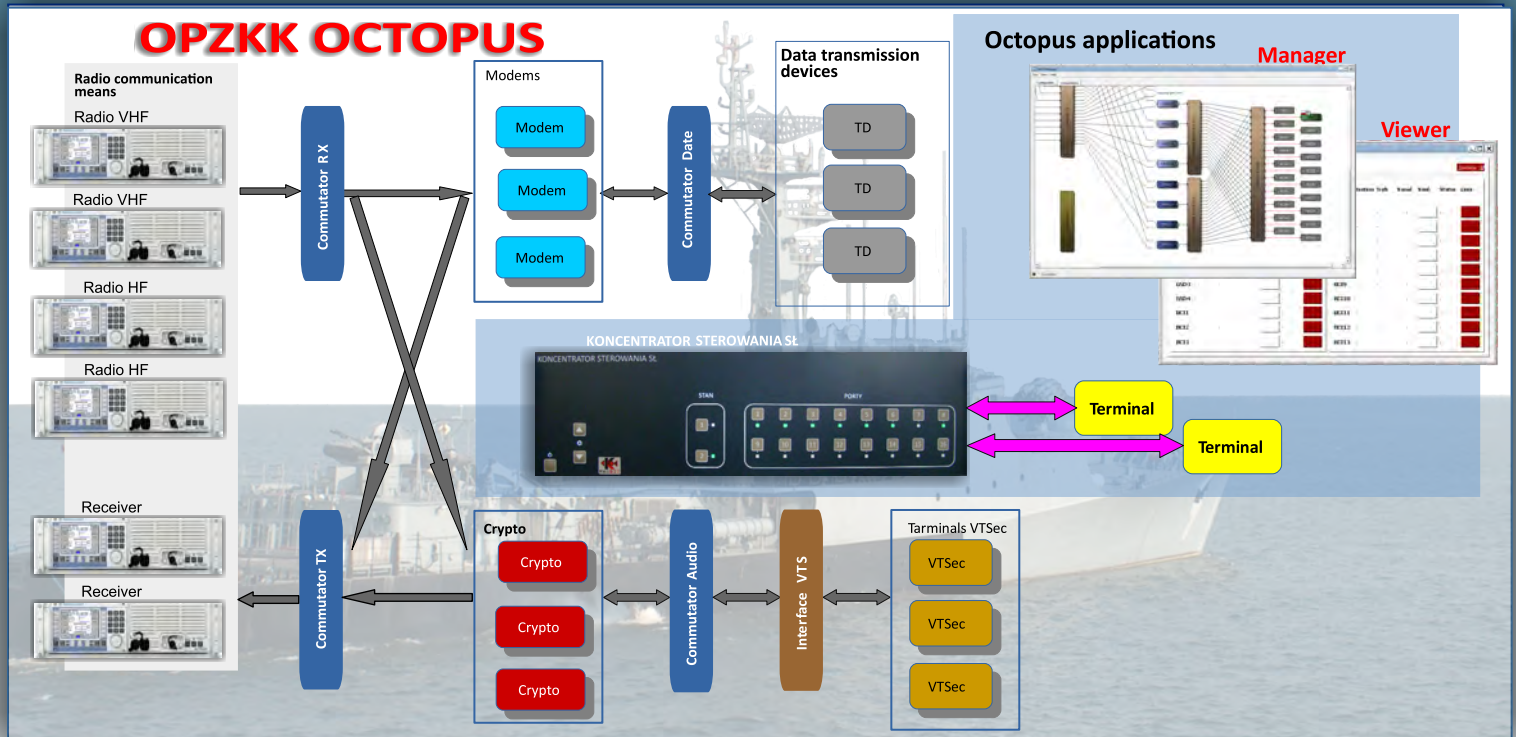
OCTOPUS system also visualizes the logical architecture of communication systems by showing internal commuted connection tracks, including the physical connections. The user has the opportunity to observe all audio and data connections between terminal and intermediate devices.

OCTOPUS is implemented in a client-server architecture. Function of the server is fulfilled by Communication System Control Hub. It has interfaces to asynchronous serial data transmission and optical Ethernet with ability to connect modems, radio, matrix switches and VTS interface. The role of the server clients performs the applications installed on the terminals.

FEATURES

- Visualization of the communication system components and physical connections among them.
- Visualization of the components state (for example: transmission, receiving).
- Visualization of the logical connections among the terminal devices (for data transmission and audio transmission).
- One post management of communication devices.
- System configuration with one push-button, according to written data.
- Storage and visualization of additional data related to radio communication.
- Interface to outer systems.





SYSTEM COMPONENTS

Communication System Control Hub is a basic central hardware component, dedicated for operation of the system, which performs the server function.

Functions of the systems ensure the special applications, which are activated by functional persons on PC terminals:

- Menager,
- Viewer.

COMMUNICATION SYSTEM CONTROL HUB

The device is a core component of the remote control and configuration of communication system. It has 16 asynchronous ports (RS-232, RS-422) and an Ethernet optical port (TCP/IP) with the ability to connect modems, matrix switches, radio transmission media and other required devices. The LEDs on the front panel show the status of controlled devices. The equipment is fitted for installation in a standard RACK cabinets.

Hub cooperates with all the components of the Integrated Communication System NEPTUN, which were equipped with the appropriate interface for remote reconfiguration and management.

OCTOPUS APPLICATIONS

Manager – application designated for visualization of physical and logical connections among devices, state of devices and configuration. It provided the access to vessel's all communication devices from one post and capability to configure the whole system with one push-button, according to written data. Management of the devices is done through configuration forms. System allows access for multiple users at the same time via central Communication System Control Hub.

Viewer - application with a similar functionality to Manager, but without the capability to configure the devices.

