

***REXDAN* Research Vessel**

Biodiversity Monitoring Systems

are dedicated to monitoring biodiversity in the area of the Danube river basin and include a series of equipment which can be used for:

- biodiversity monitoring;
- biodiversity inventory;
- creation and maintenance of databases related to biodiversity;
- creation of biodiversity distribution maps;
- behavioral observation of biodiversity;
- estimating the numbers of individuals or groups of individuals.

Members:

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Biodiversity Monitoring Systems

Equipment:

Day System and thermal video cameras, on stabilized naval platform - FLIR

Uses:

- monitoring, inventorying, spatial identification at night and day of species of national and international interest located in the area of the Danube riverbanks .

Technical specifications:

External visible and thermal camera system for naval use:

- gyroscopic stabilization in two axes;
- continuous rotation of 360° in azimuth (horizontal plane);
- adjustment of +90°/-90° in elevation;
- protection level of the external assembly of minimum level IPX6.

The visible camera:

- allows recording of color images;
- minimum HD resolution;
- optical zoom: minimum 20x;
- adjustable focal distance;
- digital zoom: minimum 8x.



Biodiversity Monitoring Systems

Equipment:

Day System and thermal video cameras, on stabilized naval platform - FLIR

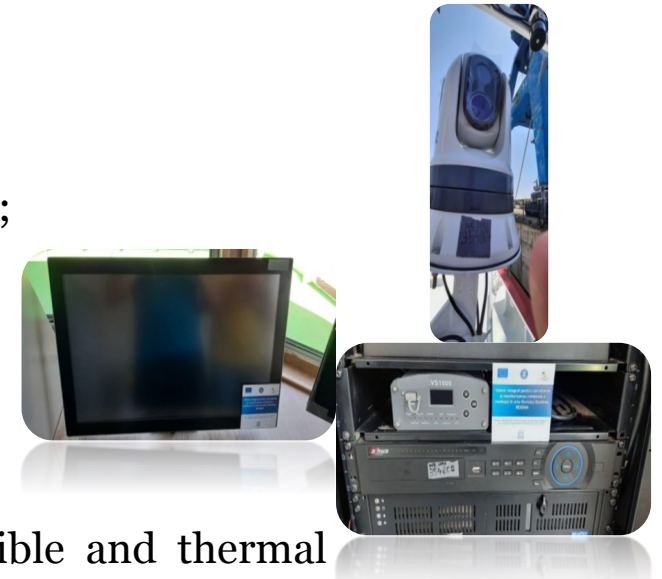
Technical specifications:

The thermal chamber:

- microbolometer type sensor with a minimum resolution of 640x512;
- Continuous digital zoom up to 4x;
- fixed focal distance of at least 25mm;
- focusing from a minimum of 3m;

Visualization and control system mounted in the wheelhouse:

- dedicated and compatible joystick for remote control of the visible and thermal camera system equipped with function access keys for the system, LCD display or equivalent.
- DVR mode for time-stamped recording of images.
- wired compatible trackball for DVR control.
- naval monitor with minimum HD resolution, color, compatible with the camera system and other components.



Biodiversity Monitoring Systems

Equipment:

Portable observation binoculars with rangefinder

Uses:

- monitoring species from the biodiversity of the Danube river basin.
- making an inventory, monitoring and estimating the numbers of individuals of the species of interest in the research area of REXDAN RI.
- measuring distances and sizes of individuals.

Technical specifications:

- magnification power: minimum 8x
- constructive type: Roof
- splash resistant
- visual field at 1000m: minimum 50 m
- measuring distance with rangefinder: minimum 500 m
- focusing system: central
- compass;
- distance meter;
- protective covers for lenses;
- transport bag;
- lens and eyepiece cleaning material;
- compatible batteries for supplying at least 10 pieces;



Biodiversity Monitoring Systems

Equipment:

Binoculars / Monocular with FLIR thermal vision

Uses:

- monitoring species from the biodiversity of the Danube river basin.
- making an inventory, monitoring and estimating the numbers of individuals of the species of interest in the research area of REXDAN RI.
- measuring distances and sizes of individuals.

Technical specifications:

- magnification (zoom): minimum 4x;
- thermal imaging sensor resolution: minimum 384 x 288 pixels;
- hot body detection at a distance of at least 800 meters;
- storage memory of at least 4GB;
- wireless connection with portable devices such as tablet, phone or laptop;
- compatible rechargeable battery;
- image capture and video recording function;
- Cable for power supply;
- user manual;
- material for cleaning optics;



Biodiversity Monitoring Systems

Equipment:

Uses:

Professional avifauna monitoring camera

- monitoring species from the biodiversity of the Danube river basin.
- making an inventory, monitoring and estimating the numbers of individuals of the species of interest in the research area of REXDAN RI.

Technical specifications:

- professional camera for monitoring biodiversity, with included accessories;
- camera with viewfinder and full frame sensor with a resolution of 60 MP;
- focus modes: automatic and manual;
- ISO range included in the range: 50 – 40000;
- filming function: FHD (1920 x 1080) with 30p/ fps;
- lens compatible with the camera with a focal length range in the range: 20 – 150 mm;
- backpack/bag for transport adapted for the dimensions of the camera, lens and accessories;
- data transfer cable compatible with the camera;
- device body protection cover;
- shoulder strap for the camera;
- battery compatible with the camera;
- charger/power supply for battery charging compatible with the standard network in Romania;
- SD cards compatible with the camera: 128 GB.

