

eCOLAB 4.0

“Innovative, collaborative and interoperable tools for improved higher education curricula on sustainable Industry 4.0 manufacturing”

Project 3 – Multifunctional Accessory for DJI Mavic 3 Enterprise

Theme:

The **DJI Mavic 3 Enterprise** drone is considered as the base platform. The goal is to design and build a **modular accessory** that can be adapted to the drone and allow the safe transport of small items.

Main objectives:

- Develop a lightweight attachment system compatible with the Mavic 3 Enterprise.
- Enable the transport of useful objects such as:
 - Letters/documents
 - Keys
 - Small meals/snacks
 - Water bottles
 - First-aid kit or medical supplies
- Integrate additional functionalities to increase versatility.

Possible extensions / additional ideas:

- **Remote release mechanism** (delivery controlled by the pilot).
- **Thermal compartment** (insulation to maintain the temperature of food or medicine).
- **Support for environmental samples** (water, soil, air).
- **LED lighting or signaling** for night operations or emergency situations.
- **Floating system** for delivery in aquatic environments (lakes or rivers).



Figure 3. a. General concept of the accessory adapted to the drone, Modular transport structure (box/hook/clip), Remote release mechanism