OSE

Osprey Systems Engineering

EU Declaration of Conformity

In accordance with European Parliament and CouncilDecision No 768/2008/EC Annex III

1. Product model / product:

Product UGV (Unmanned Ground Vehicle)

Model/type Block V

Batch/serial no. OSE_UGV_V_***, OSE_UGV_V_***

2. Manufacturer:

Name Osprey Systems Engineering

Address Unit 4, Derwent Mills Commercial Park, Wakefield Rd,

Cockermouth CA13 0HT

Authorised Representative:2

Name Dr. Benjamin Jonathan Bird

Address Unit 4, Derwent Mills Commercial Park, Wakefield Rd,

Cockermouth CA13 0HT

3. This declaration is issued under the sole responsibility of the manufacturer.

4. Object of the declaration:

Product Description:

The UGV (Unmanned Ground Vehicle) is a small, low cost, mobile robot designed to carry a wide variety of payloads in a wide variety of environments.

The UGV is capable of powering payloads with a 14.8 V (nominal) output, and communicate via USB3.0 and Ethernet. An internally mounted 310 Wh battery provides up to 48 hours of operation in standby mode and can be recharged utilising the provided Li-lon charger. Additional battery capacity of up to 1 KWh of storage is also available.

A camera feed is provided to the user, who can operate the UGV using either an open source Android application, or an open source software framework (ROS) on a Linux computer.

The UGV can function as an edge computing device. The user is provided with root access to the onboard computer, and is provided with the UGV Python API upon request.

This UGV is primarily intended to utilise a Rajant mesh

"breadcrumbs", for communication

Specification The specifications for the OSE UGV are as follows:

- 310 Wh battery, giving up to 48 hours operation in situ, in standby mode
- Battery can be upgraded to up to 1 KWh of storage, depending on user requirements
- 41 mm ground clearance
- 377 X 437 X 158 mm (width, length, height) without Leica BLKARC, height of 310 mm with Leica BLKARC mounted
- Maximum payload capacity of 10 Kg
- Independent corner, PID controlled 4WD system (all 4 wheels have their own drive system)
- Minimum speed of 100 mm / s
- Maximum speed of 1000 mm / s
- USB3.0 connectivity for additional payloads
- Optional 10/100 Ethernet connectivity for external payloads
- Optional 48 V passive PoE or PoE+ 48 V output for external payloads (Fluke SV600, Createc NV3) - Capable of doing 3 NV3 scans without charging with default battery config, and up to 11 scans without charging with 1 Kwh option
- 14.8 V (nominal), 4 A (maximum) GPIO controlled power bus for external payloads
- Controlled with Android app (phone / tablet) or Linux laptop, both can be provided if the user does not have a suitable device to hand Python API available for third party integration
- Brushless DC motors 19 Kg.cm torque per corner







5. The object of the declaration described above is in conformity with the relevant Union harmonisation legislation:

2014/35/EU The Low Voltage Directive

2014/30/EU The Electromagnetic Compatibility Directive

2011/65/EU The Restriction of Hazardous Substances Directive

6. Additional information

Signed for and on behalf of: Osprey Systems Engineering

Place of issue: Unit 4, Derwent Mills Commercial Park, Wakefield Rd,

Cockermouth CA13 0HT

Date of issue: 05/02/2024

Name: Dr. Benjamin Jonathan Bird

Position: Managing Director

Signature:

