



Osprey Systems Engineering

Declaration of Conformity

In accordance with BS EN ISO/IEC 17050-1:2010

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-Ion 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 UK Statutory Instruments and Standards:*

2016 No. 1101	The Electrical Equipment (Safety) Regulations 2016
2016 No. 1091	The Electromagnetic Compatibility Regulations 2016
2012 No. 3032	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012

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*
Function: *Managing Director*
Signature: 