Operator Control Unit

OCU-1000





Tellumat's Ground Control System (GCS) is a portable solution for controlling and managing unmanned vehicles. The GCS comprises of one or more Operator Control Units (OCU) and together with an AP1000/1100 antenna positioner form the complete Ground Control station solution

The GCS provides a fully networked capable system for the distributed control of UAV's as well as their payloads allowing for flight range extension by deploying additional networked GCS units. The key to this configuration are that the OCU's as well as the antenna positioner can be separated and networked by a secure network

This Beyond-Line-of-Sight (BLOS) component provides for multiple applications such as border and coastal patrol, pipe line observation and power line monitoring. Additionally this allows for centralised skilled UAV operations allowing for cost effective scheduling of highly skilled staff.

The OCU's are robust units housed within a ruggedized water proof container that can be deployed anywhere. The units are fitted with sunlight readable, fully HD, touch screen monitors. They provide an adaptable solution for either controlling the UAV, payload or both to meet deployment requirements.

The complete system can be transported and/or fitted into any suitable single vehicle with the minimum of effort. No permanent installations are necessary allowing for complete adaptability and versatility.

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Fully networkable

Man portable

Reconfigurable software

BENEFITS

Allows for separated operation and BLOS operation

Ease of transportation and versatility

Less hardware is required, lowering costs

HARDWARE FEATURES

CPU i7-4700EQ Quad Core processor

Display Type 21", 1920 x 1080 (HD), Touch screen

Display Brightness 1600 nits

Ethernet 4 x GbE

USB 4 x USB 3.0

SATA HD 2 x 500Gb, RAID 1
Power 220vAC @ 500w

SOFTWARE FEATURES

Pilot Control

Waypoint Navigation 100 fully configurable waypoints
Return Home 25 fully configurable waypoints

Set Point Combined singular inputs of Heading, Airspeed and

Altitude

Manual Variable inputs via RC Control box

Mapping Upload of geo-referenced maps with multiple

overlays

Communications ——— Antenna Positioner and data link control and status

ATC Navigation beacons, Transponder, ATC radio and

Altitude calibration

Deployment Runway and alternative GCS positions configuration

Video Viewing, recording and playback

UAV Control and status as well as alarm management

Payload Control

Payload Configuration and full tilt, Pan and Zoom control

Video Viewing, recording and playback

Map Viewing

PHYSICAL CHARACTERISTICS

Mass 45Kg

Dimensions 1170mm x 535 mm x 245mm

Case Features Rugged polyethylene case with carry handles, wheels

and pressure relief/breather valve

ENVIRONMENTAL

Environmental Protection IP66 when the OCU lid is closed

Operating Temperature 0° to +50°C

Transportation Shock

Waterproof and dust tight MIL-C-4150J
Resistant to Impact Damage MIL-STD-810F
Resistant to UV and Solvents MIL-STD-810F

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