



 Peripherals > Ground Control Station

GHU-100 – Ground Hub Unit

The GHU-100 is the UAV Navigation-Grupo Oesía's Ground Hub Unit intended to connect multiple ground devices together (PC, Datalinks, Joystick, etc) and form a single network segment. Specially designed for multi UAV or multiple GCS missions.

Key Features:

Multi UAV & Multi GCS Missions



System Ready for Complete Maritime Missions



High System Flexibility



Easy Integration on Advanced GCS Architectures



Increased System Robustness

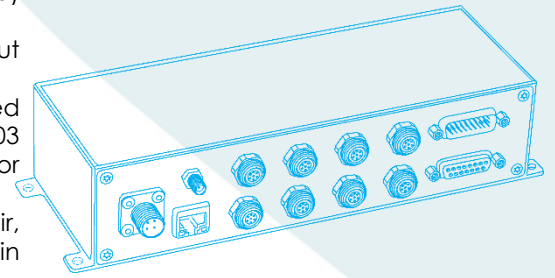


Simple Installation and Configuration



Features:

- The manufacturer will be able to implement radio redundancy to ensure a quick response in case of communication failure.
- Bi-directional communications between Visionair (on the ground) and the onboard autopilot (in the air).
- Connection point in the system for the joystick to allow manual input by an external pilot.
- Internal GNSS for GCS autonomous geolocalization. The integrated GNSS receiver has been upgraded compared to what the GCS03 featured to be more accurate and robust against jamming or spoofing.
- Routing message functionality to optimize air-to-air, ground-to-air, and air-to-ground communications. This is a basic requirement in advanced missions such as multi-UAV and multi-GCS.
- Integrated NMEA input for reference source support.
- Efficient RTK corrections message dispatching from the base directly to the rover.
- Dual GNSS compass support as reference source input.
- Discrete input to command several user switches independently of Visionair.
- Visionair - GHU Config Tool for easy configuration and software upgrade.
- Up to 10 ethernet sockets for multiple ethernet peripheral connections (radios, Visionair...).
- Hardware design to conform with IP66.



Technical Specs:

MECHANICAL / ENVIRONMENTAL	
Size (mm, H x W x L)	55 x 215 x 90
Weight	650g
Enclosure Material	Anodized aluminum
IP Rating	Designed to conform with IP66
ELECTRICAL	
Voltage Supply	9V - 36V DC
Power consumption	1.15W (without any peripheral connected)
I/O	
Power Connector	Binder M12-A Female cable Connector
Connectivity	5 x RS-232 1 x RS-422/485 1 x CAN 1 x PPM 1 x JY02 connection 12 x GPIOs 6 x ADCs 1 x Ethernet

GNSS SPECIFICATION	
Receiver Type	72 Channel, L1C/A, L1OF, B1I, E1B/C
Constellations	GPS, GLONASS, Beidou, Galileo, QZSS, SBAS
Antenna	Active (for best performance) or passive
Antenna Connector	50 Ohm SMA Female
Antenna Power Supply	3.2V
Time to First Fix (Cold/Hot)	<26s / 2 s
Velocity Accuracy	0.05 m/s (50% at 30 m/s)
Horizontal Position Accuracy	2.5 m, (CEP, 50%, 24 h static, -130 dbm, >6 SVs)
Accuracy of Time Pulse Signal	30 ns RMS, 60 ns 99%
Frequency of Time Pulse Signal	>1 pps
Altitude / Velocity Limit	50,000 m / 500 m/s

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