

P1-HH - GCS & HVAC Shelter Systems (GCS/SS)



P1HH Ground Control Station

The P1HH Ground Control Station & HVAC Shelters System is a cutting-edge system for controlling and piloting the Piaggio.1 Hammer Head UAV, a civil and military solution to survey territories.

The GCS Shelters System has been designed, manufactured and qualified at Teknel's headquarters (Rome - Italy). The GCS/SS is operative in the temperature range $-40^{\circ}\text{C}/+60^{\circ}\text{C}$ and meets all the environmental requirements: humidity, wind, altitude, fungus, molds and salt spray.

The GCS System is designed for transports due to its efficiency and adaptability to transport by rail, ship, truck, and cargo aircraft; automatically loadable, equipped and fitted with rack, cabinet, as well electrical boards, lighting systems and multifunction consoles for the Head Mission and Pilots.

P1-HH - GCS & HVAC Shelter Systems (GCS/SS)



Materials:

Profiles: Aluminium alloy 6060/6061 T6

Sheets Aluminium alloy 574H111

P1HH Ground Control Station Technical

Characteristics:

Young Module: $E = 69.000 \text{ N/mm}^3$

Elastic Module Transfer: $G = 26.000 \text{ N/mm}^3$

Density: $\rho = 2.700 \text{ Kg/m}^3$

Breaking Point: $\delta R = 195 \text{ N/mm}^2$

Yield Strength: $\delta S = 138 \text{ N/mm}^2$

Elongation Factor: $A = 11\%$

P1-HH - GCS & HVAC Shelter Systems (GCS/SS)



Technical Characteristics

Shelter Type: IOS-STD 45 ft.

External Dimensions: 13716 x 2438 x 2896 mm

The MIL-STD Shelter Systems are equipped by the following MIL-STD subsystems:

- ✓ n. 2 Air Condition Systems
- ✓ n. 2 Workstations for n. 2 Operators
- ✓ n. 1 Shock absorbed Main Switchboard Rack
- ✓ n. 6 Shock absorbed Equipment Racks
- ✓ n. 1 EMI / RFI shielding protection kit
- ✓ n. 1 Accessories kit

P1-HH - GCS & HVAC Shelter Systems (GCS/SS)



HVAC FOR GCS (GROUND CONTROL STATION FOR UAV P.1-HH) MIL-STD SHELTER SYSTEMS



Technical Characteristics

External Systems Dimensions: 1612 x 1016 x 1900 mm

Shelter Type: IOS-STD 45 ft.

Weight: 800 Kg

Cooling Power: 24 kW at + 55° C outdoor air temperature

Heating Power: 6 .000 Watts + 6.000 Watts

Air Flow Rate: 6.000 m3/h

Refrigerant Gas: R 134A

Power Supply: 400 Vac - 3 ph - 50 Hz + N

Power Supply Operating Conditions:

- ✓ Temperature at humidity 100%: +55°C
- ✓ Temperature at humidity 100%: -40°C

Indoor/Storage Temperature:

- ✓ Temperature: - 40 °C
- ✓ Temperature: + 60 °C

