



World's first TÜV Rheinland IEC safety certification

This fuel cell system, specifically design for UAV and drones can power a drone with 5 kg payload and 25 kg take-off weight for more than 2,5 hours or 30 km flight.

Applications: UAV and drone hydrogen systems for extra-long endurance: fire surveillance, Defense, agriculture mapping, fertilizing...

Specification

| | |
|--------------------------------------|--|
| Hydrogen purity | ≥99,99% (CO < 1PPM) |
| Hydrogen pressure | 0,05 MPa - 0,09 MPa (recommended pressure 0,07 MPa) |
| Operating ambient temperature | -5°C to 42°C |
| Working environment humidity | 10% - 95% RH |
| Nominal system rating | 1.700 W |
| Bare stack power rating | 1.900 W |
| Rated Voltage | 51 V |
| Rated Current | 33,3 A |
| DC Voltage Range | 50 – 85 V |
| Average efficiency | >50% |
| Hydrogen consumption | 23,1 L/min (STP) |
| Start-up time | 1,8 seg |
| Life-span | 2.000 h |

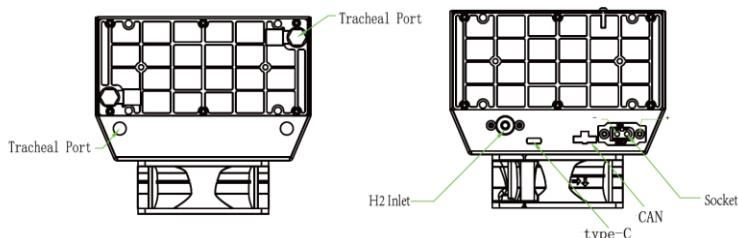
Product configuration

| Environmental characterization | | Physical parameters | |
|--------------------------------------|---|--|-----------------|
| Operating ambient temperature | -5 °C to 42 °C (can be extended to -30 °C – 50 °C by adding customized thermal management modules) | Bare stack size (mm) | 248 * 148 * 68 |
| Operation ambient humidity | 10 % - 95 % RH | Bare stack weight (kg) | 2,10 |
| Storage ambient temperature | -50 °C to 70 °C | System size (mm) | 248 * 154 * 132 |
| Optimal storage Environment | 20 °C – 50 % RH | System weight (kg) | 2,90 |
| Noise | ≤50 dB @3m (levels may vary slightly according to operating conditions) | Bare stack volumetric power density (W/L) | 760 |
| | | Bare stack masic power density (W/kg) | 960 |

Other information

The fuel cell system includes the stack, cooling fan, intake and exhaust solenoid valves, FCCU module, DC/DC converter for component power supply, cables and housing.

The system layout can be centralized or distributed according to the customer's installation space.



| | |
|----------------------|-------------------|
| H2 Tube | PU6mm |
| Communication | USB-C |
| CAN | X3025WRS-04D-LPSW |
| Power Output | Amass XT60E-F |