



INTERNATIONAL
Water·Guard

P/N 09-160800-001



*DRINKING WATER FROM
ANY POINT OF USE
ON AN AIRCRAFT
IS NOW POSSIBLE!*

INTRODUCING
UV-C LED

UWL1

WATER DISINFECTION UNIT



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IWG-UVL1: A compact water disinfection component that ensures safe drinking water from any point of use on an aircraft.

UWL1

WATER DISINFECTION UNIT

IWG-UVL1

IWG's newest water treatment component, IWG-UVL1, was developed using UV-C LED technology and designed for point of use disinfection applications. The UVL1 is compact, light and easy to install. The unit's controller provides optimized LED power activation to achieve up to 4,300 hours of disinfection and ensure the safety of aircraft water for up to five years or more depending upon the amount of water served.

The UVL1 controller has Power Efficiency Administration, and monitors water flow, dosage, operation hours and abnormal conditions.

The UVL1 was tested at an independent dosimetric testing laboratory that confirmed the unit produces UV-C LED dosage equivalent to an NSF 55 Class B at 1 gpm.



P/N: 09-160800-001 Low Power (also has lower flow of 0.35 GPM) | 09-160801-001 Regular (1GPM)

PHYSICAL

Overall Dimensions:

High: 7-3/8" (18.7cm)
Wide: 2" (5 cm)
Weight: 1.8 Lbs (0.8 Kg)

ELECTRICAL

Input Voltage: 28VDC
Power Configuration: 56W for 09-160801-001
Electrical Interface: MS38999 Series
Current Draw: Low power capped at 1.2A
Regular power consumption is Max 2A
Communications: USB/RS-232/RS-485 (Optional)

PERFORMANCE

Temperature: 5°C - 50°C (41°F - 122°F)
Output Power: 700mW MAX
Dosage Capacity: 16 mJ/cm2 at 1.0 gpm (NSF55 Class B)

PRESSURE/FLOW

Water Pressure: 60 psig (4.1 bar)
Flow Rate: 09-160801-001 is a 0.35gpm
09-160800-001 is 1 GPM

QUALIFICATION

DO-160G Qualified
NSF-55 Class B(@ 90 UVT) Verified

QUALIFICATION PLAN MATRIX

| Test | Method |
|------------------------------------|-----------------|
| Temperature | Category A3 |
| Altitude | Category A3 |
| Temperature Variation | Category C |
| Operational Shock & Crash Safety | Category B |
| Vibration | Category S |
| Humidity | Category A |
| Waterproofness | Category W |
| Fluids Susceptibility | Category F |
| Magnetic Affects | Category A |
| Power Input | Category A |
| Voltage Spike | Category A |
| Audio Frequency Susceptibility | Category R |
| Induced Signal Susceptibility | Category ZC |
| Radio Frequency Susceptibility | Category T |
| Radio Frequency Emissions | Category M |
| Lighting Induced Transient Effects | Category XXG3L3 |
| Electrostatic Discharge | Category A |
| Fire, Flammability | Category C |

Design Assurance Tests

| |
|----------------|
| Endurance |
| Burst Pressure |
| Proof Pressure |