



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 TREATMENT UNIT



INTERNATIONAL
Water·Guard

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

UWL1

WATER TREATMENT UNIT

IWG-UVL1

IWG's newest water treatment component, IWG-UVL1, was developed using UV-C LED technology and designed for point of use treatment 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 treatment 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