



INTERNATIONAL  
Water·Guard



# UW1

AIRCRAFT  
potable water  
treatment unit

## WHAT IS UV?

UVC refers to ultraviolet light with wavelengths between 200 - 280 nanometers (nm). Light in the UVC wavelength can be used for disinfecting water, sterilizing surfaces, destroying harmful micro-organisms in food products and in air.

## WHY IT WORKS

Provides pathogenic disinfection of the water using UV light at the point of upload from the service water cart before it enters the aircraft potable water tank.

## HOW UV WORKS?

UVC radiation, in the range of 250 nm - 280 nm, renders harmful microorganisms such as bacteria and viruses ineffective, by destroying the genetic information in the DNA. The micro-organisms lose their reproductive capability and are destroyed. The germicidal nature of UV is well suited to treat parasites which are extremely resistant to chemical disinfectants, such as Cryptosporidium or Giardia.



The IWG-UV1 represents the latest generation of International Water-Guard's aircraft water treatment units, using proven ultraviolet and sediment filter technology with state of the art design.

Developed for higher flow capability, the unit incorporates all new electronics and full monitoring to integrate with the most advanced water system control or cabin management system.

## PHYSICAL

**Overall Dimensions:**  
**High:** 13.68" (347.47 mm)  
**Wide:** 9.24" (213 mm)  
**Deep:** 4" (102 mm)  
**Net Weight Dry:** 9.5 lbs (4.31 kg)

## ELECTRICAL

**Input Voltage:** 28 VDC (nominal)  
**Nominal Current Draw:** 2.0A at 28 VDC  
**Electrical Interface:** Two 38999 Series 2 Connections  
**Data Communications:** RS-485 half duplex packet protocol.

## ENVIRONMENTAL

**Temperature Range:** 5°C to +40°C (+41°F to +104°F) Operating water temperature  
**Storage:** -40°C to +70°C (-40°F to +158°F dry)  
**Cooling:** By natural connection

## PRESSURE/FLOW

**Maximum Pressure:** 60 PSIG (operating pressure)  
**Maximum Flow Rate:** 4 GPM at NSF class "A" disinfection levels  
**Pressure Drop:** 5 PSID at 4 GPM

## STATUS INDICATOR

**On Board Indicator:** 3 (Three) state indication  
**Data Communication:** Operational status and control

## QUALIFICATION

**RTCA/DO-160G**  
**FAA/TCCA/EASA Airworthiness requirements**

