

# SVDU Rugged Mission Displays

**CURTISS-  
WRIGHT**

CURTISSWRIGHTDS.COM



## Key Features

- Very high brightness provides anytime readability
- Night vision compatibility
- Full touchscreen capability
- Single DVI input
- Highly configurable and field upgradeable
- Fully ruggedized and sealed unit

## Applications

- Airborne (rotary and fixed wing)
- Civil (police, search and rescue) and military
- Naval and ground vehicles

## Overview

Curtiss-Wright's SVDU range of rugged mission displays offers a unique combination of new technology, including optically-bonded glass, dual mode NVIS-compatible LED backlighting, and full touchscreen operation. Supporting a single DVI input and a USB touchscreen the SVDU range is the ideal companion to a mission computer.

The SVDU mission displays are currently available in six display sizes and resolutions to address a wide variety of applications on ground, airborne and naval platforms. All the displays are fully qualified to established environmental standards.

The displays feature a DVI video input and USB interface on a highly rugged 38999 connector to provide a secure connection even in high-vibration environments, with the added benefits of environmental protection offered by this type of connector.

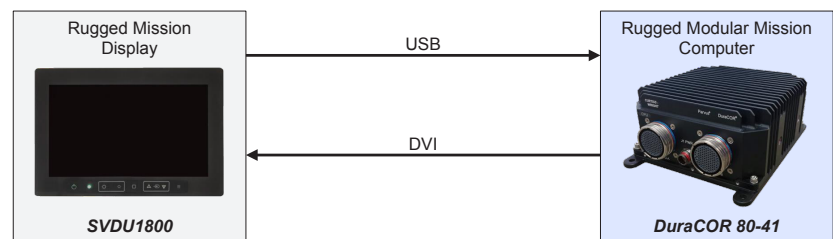


Figure 1: Typical usage



Figure 2: Members of the new Curtiss-Wright SVDU rugged mission display family (left to right: 21.5" SVDU5500, 14.1" SVDU3600, 7" SVDU1800)

## Specifications Summary

### Video inputs

- 1 x DVI

### Control interfaces

- 1 x USB
- 2 x Day/night/NVG discrete
- 1 x External inhibit

### Display brightness

- 1000 cd/m<sup>2</sup>

### Additional features

- Five-wire resistive touchscreen
- Day/night/NVG discrete inputs for control of lighting mode changes
- Customer-specific configurations and software updates applied using USB memory stick

## Daylight Visibility

The displays offer market-leading daylight visibility by means of powerful LED backlights and optical bonding to reduce internal reflection and enhance contrast. The mission displays are suitable for use in conditions of high incident light including open cockpits.

## Night Vision

Night Vision Goggle (NVG) compatibility to MIL-STD3009 NVIS B as standard. The display is fitted with a dual-LED light source including NVG-filtered LEDs at low levels for NVG operations. All front-panel LEDs and key backlighting are NVG-filtered. The brightness of the bezel lighting is controlled along with the brightness control of the display, but can be customized to connect to an aircraft lighting bus.

## Ordering Options

**TABLE 1** SVDU Rugged Mission Display ordering options

PART NUMBER	SVDU1800-000	SVDU2600-000	SVDU3000-000	SVDU3600-000	SVDU4310-000	SVDU5500-000
Screen size (diagonal)	7"	10.4"	12"	14.1"	17.3"	21.5"
Dimensions (including connectors)	7.48 x 5.16 x 2.34" 190 x 131 x 59 mm	9.6 x 7.9 x 3.2" 250 x 200 x 82 mm	12.2 x 9.5 x 3.2" 310 x 241 x 82 mm	14.1 x 10.8 x 3.4" 357 x 274 x 87 mm	16.9 x 11.8 x 3.2" 430 x 300 x 82 mm	20.8 x 13.9 x 3.2" 529 x 352 x 82 mm
Format (aspect ratio)	16:9	4:3	16:10	16:10	16:9	16:9
Resolution	1920 x 1080	1024 x 768	1280 x 800	1280 x 800	1920 x 1080	1920 x 1080
Mass	3.31 lb 1.5 kg	8.8 lb 4.0 kg	10.8 lb 4.9 kg	13.2 lb 6.0 kg	13.7 lb 6.4 kg	19.4 lb 8.8 kg
Power, not including heaters	25W	40W	55W	55W	70W	85W
Power, including heaters	40W	80W	105W	95W	120W	140W

## Environmental Specifications

TABLE 2	EMC and power input
FEATURE	COMPLIANCE
Magnetic effect	DO160G Category A
Power input	DO160G Category B
Voltage spike	DO160G Category B
Audio frequency	DO160G Category Z
Induced susceptibility	DO160G Category B
RF susceptibility	DO160G Category S
RF emission	DO160G Category B
Electrostatic discharge	DO160G Category A
Fire, flammability	DO160G Category C

TABLE 3	Environmental
FEATURE	COMPLIANCE
Temperature	DO160G Category A1 › Operating: -20 to 55°C › Short-term operating: -20 to 70°C › Non-operating: -55 to 85°C
Temperature variation	DO160G Category C (2°C/minute)
Humidity	DO160G Category A (RH 0 to 95%)
Vibration	DO160G Category U › Sine: 2 G peak, 10-2 kHz › Random: 0.02 g <sup>2</sup> /Hz 10-2 kHz
Shock	DO160G Category B (6 g's peak, 11 ms wide)
Crash safety	DO160G Category B
Explosion proofing	DO160G Category E Environment III
Waterproofing	DO160G Category W
Fluid susceptibility	DO160G Category F
Sand and dust	DO160G Category D
Fungus resistance	DO160G Category F
Salt spray	DO160G Category S