

SVDU-M

7" Rugged Mission Displays with Projective Capacitive Multi-touch Touchscreen

**CURTISS-
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Key Features

- Anytime readability
- Very high brightness
- Multi-touch PCAP touch screen capability
- Single DVI input
- USB interface
- 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 has decades of industry-leading experience developing reliable, rugged, mission displays for extreme environments and applications. To compliment the Advance Video Display Unit (AVDU), Single Video Display Unit with resistive touchscreen (SVDU), RVDU never made it to market, and Ground Video Display Unit (GVDU) ranges, the SVDU-M (Single Video Display Unit with Multi-touch) range of rugged mission displays offers a unique combination of new technology that includes optically-bonded glass, and new multi-touch projective capacitive (PCAP) touchscreen operation that maintains reliability and responsiveness even when the operator is wearing gloves or the screen is wet. Supporting a single DVI input and a USB touchscreen, the SVDU-M range is the ideal companion to a mission computer.

PCAP Multi-touch

With PCAP touch screens, users do not need to consistently apply pressure to the screen. Instead, they can simply slide their fingers across the screen using the same intuitive, multi-touch gestures they are already familiar with to drag screen objects, zoom in and out of images, and swipe in all directions. When users can quickly and easily interact with the touch screen using motions that are second nature to them, they can focus on the task at hand.

PCAP touch screens also don't suffer from the reflection and image clarity issues that resistive touch screens experience. They provide a crisper, higher quality image and higher contrast levels that make it easier for the user to see and absorb screen content at a glance while also being thinner, lighter and more rugged than resistive touch screen displays. The new SVDU-M with PCAP multi-touch display is fully qualified to established environmental standards.

The SVDU-M features a DVI video input and USB interface on a highly rugged MIL-DTL-38999 connector to provide a secure connection, even in high-vibration environments.

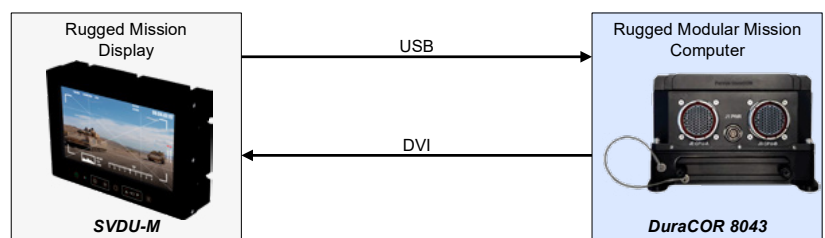


Figure 1: Typical mission display and computer configuration

Specifications Summary

Video inputs

- 1 x DVI

Control interfaces

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

Additional features

- PCAP touchscreen
- Day/night/NVG discrete inputs for control of lighting mode changes

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.

Ordering Options

TABLE 1 SVDU-M ordering options	
PART NUMBER	SVDU1800-M-000
Screen size (diagonal)	7"
Dimensions (including connectors)	7.48 x 5.16 x 2.34" 190 x 131 x 59 mm
Format (aspect ratio)	16:9
Resolution	1920 x 1080 pixels
Brightness	600 cd/m ²
Mass	3.31 lb 1.5 kg
Power	10W (without heater) 30W (with heater)

Environmental Specifications

TABLE 2 Environmental level testing	
FEATURE	DO160 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 ² /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

TABLE 3 EMC and power input	
FEATURE	DO160 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
Emission of RF Energy	DO160G Category B