

# 19"/2<sup>®</sup> KSW1101



## KVM Switch in a 19"/2<sup>®</sup> form factor

The KSW1101 is a KVM switch for DVI and USB input in a fully rugged enclosure. It accepts up to four inputs/sources of DVI and USB2.0, and has one output which provides a DVI, USB2.0 and serial connection. The serial connection is for remote KVM control of the unit.

### Small form factor

The MilDef 19"/2<sup>®</sup> form factor is optimized for reduced size, weight, and power (SWaP) to meet industry and military requirements without sacrificing reliability, ruggedness or performance.

### Flexible mounting

The 19"/2<sup>®</sup> standard enables flexible mounting options for a wide array of integration scenarios. The unit can be mounted in a standard 19" rack, half racks, or directly on to a surface and at any angle.

### Military-relevant rugged design

MilDef products are designed to operate in extreme environmental conditions and challenging electromagnetic operational scenarios. Operationally proven, MilDef products are actively employed in military operations in over 60 countries.

### Guaranteed performance

MilDef products are designed for the long lifecycles of military programs and come with a lifetime support program to ensure your equipment maintains peak performance for many missions to come.

We also guarantee the availability of spare parts for an additional 5 years after product end-of-life.

### Features

- 4x DVI and USB inputs on the front
- Single DVI and USB output on the back
- Output select button to toggle between outputs
- Interface for optional external remote

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## Connector Interfaces

<b>SERVICE</b> (back)	<ul style="list-style-type: none"> <li>1x RS232 Service</li> </ul>
<b>X1 DC IN</b> (back)	<ul style="list-style-type: none"> <li>1x Power</li> </ul>
<b>X2-X5</b> (front)	4 connectors which each has: <ul style="list-style-type: none"> <li>1x DVI</li> <li>1x USB2.0</li> <li>1x Digital IO</li> </ul>
<b>X6</b> (back)	<ul style="list-style-type: none"> <li>1x RS232/RS422</li> <li>1x Digital-IO</li> <li>1x Power</li> <li>1x MBU interface</li> </ul>
<b>X7</b> (back)	<ul style="list-style-type: none"> <li>1x DVI</li> <li>1x USB2.0</li> <li>1x RS232</li> <li>1x MBU interface</li> <li>1x GND</li> </ul>

## Other Interfaces

4x Status indicator (front)
1x Output select button (front)

## Technical Specification

<b>Blanking</b>	Double-pressing the System button
<b>Graphics resolution</b>	Max 1920 x 1200 on DVI
<b>MIL-STD-1275D</b>	5.3.2.2 5.3.2.3 5.3.2.4
<b>Polarity protection</b>	Protected against polarization failure on the power input in the voltage range of normal operation
<b>Power consumption</b>	5 W
<b>Power input</b>	10-32 VDC
<b>Chassis material</b>	Aluminum
<b>Coating and color</b>	Dupont AE0305-1101320 (RAL 1013)
<b>Cooling</b>	Passively cooled
<b>Dimensions width and height</b>	220 x 43.4 mm (8.66 x 1.71 in) (WxH)
<b>Earth point</b>	M6 12 mm
<b>Surface treatment chassis</b>	Chromit-Al
<b>Unit depth</b>	282 mm (11.1 in)
<b>Weight</b>	2.1 kg (4.6 lbs)
<b>MTBF</b>	198,352 h
<b>CE</b>	Compliant

## Environmental Specification

<b>Functional shock - Operating</b>	MIL-STD-810G, Method 516.6, Procedure I - Functional Shock. Table 516.6-II, Terminal peak sawtooth pulse, Ground equipment 40 g 11 ms
<b>High temperature - Operating</b>	MIL-STD-810G, method 501.5, Procedure II - Operation 65 °C (149 °F)
<b>High temperature - Storage</b>	MIL-STD-810G, Method 501.5, Procedure I - Storage 71 °C (160 °F)
<b>Humidity</b>	MIL-STD-810G, Method 507.5, Procedure II - Aggravated 95 ± 4 % RH Ten 24 h cycles
<b>IP Class (Solid Particle Protection)</b>	IP Class 6X
<b>IP Class (Water)</b>	IP Class X5
<b>Low air pressure - Rapid decompression</b>	MIL-STD-810G, Method 500.5, Procedure III - Rapid decompression 75.2 kPa, corresponding to 2,438 m (8,000 ft) 17 kPa, corresponding to 12,192 m (40,000 ft)
<b>Low air pressure - Operating</b>	MIL-STD-810G, method 500.5, Procedure II - Operation/Air Carriage 4,572 m (15,000 ft)
<b>Low temperature - Operating</b>	MIL-STD-810G, method 502.5, Procedure II - Operation -40 °C (-40 °F)
<b>Low temperature - Storage</b>	MIL-STD-810G, method 502.5, Procedure I - Storage -40 °C (-40 °F)
<b>Noise level</b>	Maximum noise level of 28 dB SPL A-weighting at 1 m (3.3 ft) distance
<b>Salt fog</b>	MIL-STD-810G Method: 509.5 5 % ± 1 % (by weight) Two cycles, 24 h wet + 24 h dry / cycle
<b>Temperature shock - Operating</b>	MIL-STD 810G, method 503.5 procedures I - C, - Multi-cycle shocks from constant extreme temperature 55 °C (131 °F) -40 °C (-40 °F)
<b>Vibration - Helicopter</b>	MIL-STD-810G, Method 514.6, Procedure I - General vibration, Category 14 - Rotary wing aircraft - helicopter

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**Vibration - Loose cargo** MIL-STD-810G, Method 514.6, Procedure II - Loose cargo transportation, Category 5 - Truck/trailer - loose cargo

**Vibration - Tracked vehicles** MIL-STD-810G, Method: 514.6, Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, tracked vehicles

**Vibration - Wheeled Vehicle** MIL-STD-810G, Method: 514.6, Procedure 1 - General Vibration, Category 20 - Ground vehicles - ground mobile, wheeled vehicles

## EMC Specification

**EMI conducted CE102** MIL-STD-461F, Method CE102  
BASIC CURVE  
10 kHz to 10 MHz

**EMI radiated RE102** MIL-STD-461F  
Navy Mobile & Army  
2 MHz - 18 GHz

**EMS conducted CS101** MIL-STD-461F, Method CS101, conducted susceptibility, power leads.  
CURVE #1  
30 Hz to 150 kHz

**EMS conducted CS114** MIL-STD-461F  
Army, Ground  
10 kHz - 200 MHz

**EMS conducted CS115** MIL-STD-461F  
Conducted susceptibility, bulk cable injection, impulse excitation

**EMS conducted CS116** MIL-STD-461F  
10 kHz - 100 MHz

**EMS radiated RS103** MIL-STD-461F  
Army  
2 MHz - 1 GHz