



AWS

MISSION COMPUTER WITH
SINGLE REMOVABLE DISK

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SWaP MISSION COMPUTER



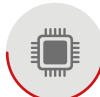





The AWS is a high performance rugged Mission Computer designed for multi-media applications. Featuring multiple display control and audio interfaces, the AWS is SWaP-C optimized and has a fanless design with no external airflow prescriptions.

The AWS features a powerful 64-bit 7th/6th Gen Intel® Core™ Processor (Kaby Lake/Skylake-H) including Intel® Hyper-Threading Technology (4 cores, 8 threads) and an up to 32GB DDR4 dual-channel memory with optional ECC support to provide an excellent overall performance. Video outputs feature three independent ports (2x HDMI + 1x VGA) while input/output ports include Audio, 4x Gigabit Ethernet ports, 2x USB 3.0 ports, 4x USB 2.0 ports, PS/2 and 4x COM ports. The AWS rugged Mission Computer is equipped with a CFast slot accessible from the front panel and with a 2.5" SATA bay suitable for the installation of a hot SWaP removable Solid State Disk with Secure Erase option. A miniPCIe slot is also available for further expansion.

The AWS is designed to meet MIL-STD-810G certifications and is fully qualified according to RTCA/DO-160G.

Product Features

-  SWaP-C optimized
-  Fanless design
-  7th/6th Gen Intel® Core™ processors
-  Triple display support + Audio
-  1x Removable SSD
-  RTCA/DO-160G qualifications



Technical Specifications

System	
Processor Module	14nm Intel® Core™ i7-6822EQ 2.0/2.8GHz (Turbo), 8M, 25W (4C/GT2)
Memory	2x 16GB Dual channel 2133 MHz DDR4 memory in dual SODIMM sockets, ECC/non-ECC support dependent on selected CPU
Video Outputs	Intel® Generation 9 LP Graphics Core Architecture, supporting 3 independent and simultaneous displays (2x HDMI, 1x VGA)
Ethernet	I219LM with AMT 11.0 support Interface 10/100/1000 GbE connection 4x Gigabit Ethernet 10/100/1000 Mbps LAN interfaces
Serial	4x programmable serial ports RS-232 or RS-422/RS485
USB	2x USB 3.0, 2x USB 2.0 + 2x additional ports type A standard behind the maintenance panel
PS/2	2x PS/2 for keyboard and mouse
Audio	Intel® HD Audio integrated in chipset 1x AUDIO IN (left/right) 1x AUDIO OUT (left/right)
I/O Expansion	4x discrete inputs. 1x MiniPCI Express slot for additional interfaces such as MIL-STD-1553 or ARINC-429 Additional I/O routed on J2 connector
Removable Storage Devices	1x removable 2.5" SATA SSD with secure erase option 1x removable CFast card
Software	Windows 10/8.1 64-bit, Windows 7 32/64-bit, Linux, 64-bit, VxWorks; Extended Support (BSP) WES 7 32/64-bit, Linux 64-bit

Power Section	
Power Input	28V nominal. Input tolerance according to MIL-STD-704F (up to 50ms internal hold-up module)
Power Consumption	80W
Features	Power interruptions up to 50ms with internal hold-up module Over voltage protection Over current protection Input transient protection

Mechanical Features	
Dimensions (W x H x D)	256.0 mm x 116.0 mm x 203.0 mm (w/out connectors) - 222.0 mm (with connectors)
Weight	5.3 Kg
Cooling	Fanless design, no external forced airflow is required
Interfaces	3x MIL-DTL-38999 military circular connectors 2x USB 3.0 with retention 2x HDMI

Environmental Features	
Operating Temperature	-20°C / +55°C (no external forced airflow is required)
Storage Temperature	-40°C / +85°C
Altitude	Operative: max 25.000 feet
Humidity	Up to 95%
Shock	6g shock, 11ms
Crash Safety	20g shock, 11ms
Vibrations	1.5g peaks, 5 Hz ÷ 500 Hz
Environmental Protection	IP65 rated according to EN 60529
Fungus Protection	Fully protected according to MIL-STD-810G and RTCA/DO-160G
EMI / Electrical Features	Compliant to MIL-STD-461G (aircraft) and RTCA/DO-160G





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