

Falcon-Strike™



Rugged Small Form Factor High Performance Multi-Mission Computer

Key Features

- CPU: 6th Generation Intel Xeon or i7 Quad-Core
- GPU: NVIDIA 1050Ti - 768 CUDA Cores
- Dual 3G-SDI or Quad HD/SD-SDI/Composite (NTSC/PAL) H.264 Encoder w/Full KLV COT Metadata
- (7) x GbE
- (2) x Removable 1TB SSDs
- PCIe/104 Expansion
- Wide-Range DC Input +12 to +48
- MIL-STD-810G Shock and Vibration
- MIL-STD 461E EMI
- NATO STANAG-4609
- IP66 Water Ingress
- -40°C to +50°C Operating Temperature

Product Highlights

Falcon-Strike™ is a fully rugged, high-performance, multi-mission C5ISR solution. It boasts a rich feature set, containing computer, video, and network capabilities, in an extreme form factor embedded package, providing an economy of capability within a superior SWaP-C optimization effort.

Falcon-Strike is an extreme duty system designed for mission-critical military operations involving Intelligence, Surveillance, Reconnaissance (ISR), Counter-UAS (C-UAS), Persistent Surveillance, Airborne Law Enforcement (ALE), Search and Rescue (SAR), and Land and Marine based missions.

Falcon-Strike is fully sealed and certified to multiple environmental standards. Providing mission capability and a force-multiplier capacity in a single Line Replaceable Unit, Falcon-Strike is the ideal solution for modern Defense applications demanding hardware consolidation.

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Specifications

ENCLOSURE

Material	Black Anodized 6061-T6 Aluminum w/Gold Alodine Interior
Indicators	Power
Controls	Power and Reset Switches
Dimensions	(W x D x H) 8" x 9.5" x 6" (with Removable SSDs)
Weight	14 lbs/6.35 kg
Sealing	O-ring Sealed for IP66 Water

System Board CPU

CPU	Intel Xeon E3-1505L Quad-Core or i7-6822EQ Quad-Core CPU
GPU	NVIDIA GeForce GTX 1050Ti 768 CUDA Cores
Memory	Up to 32GB
Video Outputs	Four Displays Supported via HDMI, DVI, or VGA full HD 1920x1080 resolution
Operating System	Supports Windows 10/8.1 64-bit, Linux 64-bit, VxWorks

Systel Encoder Board

Input	(4) x PAL/NTSC Composite Video, up to (4) x HD/SD-SDI, or up to (2) x 3G-SDI Inputs
SDI Receivers	Comply with SMPTE 259M (SD-SDI), 292M (HD-SDI), and 424M (3G-SDI)
Features	Metadata and Encoding Latency ~55 Milliseconds
Ruggedization	PCB Conformal Coated

RUGGEDIZATION

Systel	10 Point Survivor Technology
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I/O

Serial	(2) x RS-232, (2) x RS-485/RS-422
LAN	(7) x GB/E
USB	(1) x USB 3.0, (4) x USB 2.0
Power	+12 to +48 VDC Filtered
Video Inputs	Up to (4) x Various
Video Outputs	(4) x DVI/HDMI
Type	All 38999 Mil-Circular Except BNC for Video

DRIVE BAYS

Removable	(2) x 2.5" SSD
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Environment

Temperature	-40°C to +50°C, Operating -40°C to +85°C, Storage
Altitude	>15,000 ft.
Humidity	5% to 95% Non-Condensing
Vibration	MIL-STD-810G, Method 514.5, Proc 1, Cat 14
Shock, Crash	MIL-STD-810G, Method 516.5, Proc 1 and Proc V
EMC	MIL-STD-461
Water	IP66

MIL-STD-810G Shock and Vibration.

Note: Systel maintains an on-site environmental lab for shock and vibration testing. As an added benefit we can test the many different combinations for operating and non-operating profiles to meet transportation, airframe and shipboard applications.