

# RS-S2H JANUS

## TACTICAL COMPUTER SYSTEM

### OVERVIEW

The RS-S2H Janus Tactical Computer System was designed by Rugged Science with direct input from America's elite warfighters. The system packages the most powerful 6th generation Quad Core™ Intel® Xeon™ processors into a rugged, lightweight Pelican™ brand 1525 Air Case that is ready to deploy in the harshest operating environments.

Janus features dual Hi-Bright backlit LCD displays (with optional resistive touchscreen) at 1000 nits mounted to an innovative internal armature that isolates shock and vibration, and quickly folds open or closed for rapid transit. The internal PC is a fanless design with an extra large heat sink for exceptional thermal performance. The Janus is available with up to 32 Gb RAM, and boasts a -20°C to 60°C operating temperature range. In real-world tactical operations, SWAP is always a top concern; at less than 30 lbs. Janus systems are among the lightest and most powerful tactical computer systems available.

### FEATURES

- Rugged design for harsh environments
- Lightweight
- Pelican™ brand 1525 Air Case enclosure
- Dual Hi-Brite LCD display - 16.7M colors/1000 nits
- Optional resistive touchscreen available
- Optional HDMI output for display cloning
- Quad Core 6th Generation Intel® Xeon™ E3-1505m v5 (Skylake-H) CPU
- 2 DDR4 2133 MHz RAM, up to 32 Gb
- Fanless -20°C to 60°C
- Ruggedized, water-resistant, backlit keyboard with integrated 3 button touchpad

### System

<b>Processor</b>	Intel® Xeon™ E3-1505M v5
<b>Chipset</b>	Intel® CM236
<b>BIOS</b>	AMI
<b>SIO</b>	IT8786E
<b>Memory</b>	2x DDR4 2133, up to 32 Gb
<b>GPU</b>	Intel® HD Graphics P530

### I/O Interface

<b>USB</b>	4x USB 3.0 (external)
<b>SIM Card</b>	4 sockets (internal)
<b>LAN 1</b>	Intel® I219LM Ethernet LAN (supports iAMT 11.0)
<b>LAN 2</b>	Intel® I210 Ethernet LAN

### Optional Internal Expansion

<b>Mini PCIe</b>	4x Mini PCIe Socket: - 3x full-size for PCIe/USB/external SIM card/mSATA - 1x full-size for PCIe/internal SIM card/mSATA
<b>PCI/PCIe</b>	1 PCI/PCIe x 16 slot
<b>SUMIT A/B</b>	2 slots

### Storage

<b>SATA</b>	4x SATA III support S/W RAID 0, 1, 5, 10 - 3x SATA III (6GB/s) - 1x SATA III co-lay w/mini PCIe (6GB/s)
<b>mSATA</b>	4x mSATA connection: - 3x SATA III (mini PCIe type, 6GB/s) - 1x SATA III co-lay w/SATA (mini PCIe type, 6GB/s)
<b>Default Storage Config.</b>	4x 2.5" SSD, 1TB ea., RAID 1 config.

### Audio

<b>Codec</b>	Realtek ALC892, 5.1 channel HD audio
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### Power

<b>Battery Power</b>	Optional battery packs available
<b>AC/DC Input</b>	12-36V DC-in, DC auto adapter, and 120V AC adapter available
<b>Interface</b>	3-pin circular connector: V+, V-, chassis ground
<b>Remote Switch</b>	Optional
<b>Ignition Control</b>	16 mode (internal)
<b>Surge Protection</b>	Up to 80V/1ms transient power
<b>Protection</b>	Reverse polarity/Over-current/ Over-voltage
<b>Other</b>	Power status indication

### CPU Performance

<b>No. of Cores</b>	4
<b>No. of Threads</b>	8
<b>Base Frequency</b>	2.80 GHz
<b>Max Frequency</b>	3.70 GHz
<b>Cache</b>	8 Mb smart cache
<b>Bus Speed</b>	8 GT/s DMI3
<b>TDP</b>	45W configurable to 35W

### OS Support

<b>OS</b>	Win 10, Win 8.1, Win 7, Linux
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### Other

<b>Trusted Platform Mobile</b>	TPM 2.0
<b>Watchdog Timer</b>	Reset: 1 to 255 sec./min. per step
<b>Smart Management</b>	Wake on LAN, PXE support
<b>HW Monitor</b>	Temp & voltage auto-throttle on overheat

### Mechanical

<b>Dimensions</b>	21.5 x 13.5 x 7.7 (L x W x H - inches)
<b>Weight</b>	~ 30 lbs.

### Enclosure

<b>Model</b>	Pelican® 1525 Air
<b>Construction</b>	Proprietary HPX <sup>2</sup> Polymer
<b>Other</b>	Air pressure purge valve

### Environmental

<b>Operating Temperature</b>	-20° to 60° C (-4 to 140° F)
<b>Storage Temperature</b>	-40° to 85° C (-40 to 185° F)

### Testing

<b>Shock</b>	Designed to meet or exceed MIL-STD-810
<b>Vibration</b>	Designed to meet or exceed MIL-STD-810
<b>EMI</b>	Designed to meet or exceed MIL-STD-461

### Quality

<b>ISO</b>	ISO 9001:2015
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### Displays

<b>Description</b>	2x 13.3" wide TFT LCD, LED
<b>Display Area (mm)</b>	backlit 286.08 x 178.8
<b>Brightness</b>	Sunlight readable (1000 cd/m <sup>2</sup> )
<b>Resolution</b>	1280 x 800 (WXGA)
<b>Contrast Ratio</b>	800:1
<b>Colors</b>	16.2M
<b>Response Time</b>	16ms
<b>Options</b>	5-wire resistive touchscreen HDMI video out