RS-S3H CERBERUS
TACTICAL COMPUTER SYSTEM

OVERVIEW

The RS-S3H Cerberus Tactical Computer 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.

Cerberus features three 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 Cerberus is available with up to 32 Gb RAM, and a -20°C to 60°C operating temperature range. In real-world tactical operations, SWAP is always a top concern; at approximately 30 lbs. Cerberus systems are among the lightest and most powerful tactical computer systems available.

FEATURES

- **Rugged design for harsh environments**
- **Lightweight ~ 30 lbs.**
- **Pelican™ brand 1525 Air Case enclosure**
- **3 Hi-Brite LCD displays - 16.7M colors/1000 nits**
- **Optional resistive touchscreens 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

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

I/O Interface

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

Optional Internal Expansion

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

Storage

SATA	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)
mSATA	4x mSATA connection: - 3x SATA III (mini PCIe type, 6GB/s) - 1x SATA III co-lay w/SATA (mini PCIe type, 6GB/s)
Default Storage Config.	4x 2.5" SSD, 1TB ea., RAID 1 config.

Audio

Codec	Realtek ALC892, 5.1 channel HD audio

Power

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

CPU Performance

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

OS Support

OS	Win 10, Win 8.1, Win 7, Linux

Other

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

Mechanical

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

Enclosure

Model	Pelican® 1525 Air
Construction	Proprietary HPX^2 Polymer
Other	Air pressure purge valve

Environmental

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

Testing

Shock	Designed to meet or exceed MIL-STD-810
Vibration	Designed to meet or exceed MIL-STD-810
EMI	Designed to meet or exceed MIL-STD-461

Quality

ISO	ISO 9001:2015

Displays

Description	3x 13.3" wide TFT LCD, LED backlit
Display Area (mm)	286.08 x 178.8
Brightness	Sunlight readable (1000 cd/m^2)
Resolution	1280 x 800 (WXGA)
Contrast Ratio	800:1
Colors	16.2M
Response Time	16ms
Options	5-wire resistive touchscreen
	HDMI video out