

# TRUPER® 109



## Commercial off-the-shelf (COTS) High-Performance Rugged Computer System

The TRUPER® family offers the flexibility to change out electronics such as frame grabbers, video processors, extra memory, storage or other communication devices. The TRUPER® chassis provides a customizable enclosure with two removable SSDs and the latest COTS processing technology. Within the chassis natural cooling is used to provide efficient transfer from the internal electronics to the enclosure to minimize heat stress. The unit is designed to ensure reliable operation in air, land and sea platforms where the unit is subjected to shock and vibration as well as extended operating temperature ranges.

Embedded ARINC 429 and 1553 interface configuration



## Component Specifications

### Processors

- CPU: i7-4700EQ, Intel QM87
- GPU: Embedded Intel HD4600
- Nvidia GTX1050Ti or GPGPU (Optional)

### Memory & Storage

- 2 x DDR3L SO-DIMM 1333/1600MHz, 8 GB up to 16GB
- 2x removable SATA 2.5" storage bay; support Raid 0 & 1

### Display

- HDMI x1, DVI-I x1, VGA x1
- VGA+HDMI, VGA+DVI
- Clone, Independent, Extended Display

### I/O

- MIL-STD-1553 and ARINC 429
- LAN: RJ45 10/100/1000Mbps x2, Controller i217LM & 1x Intel i210AT
- Audio: Mic-in, Line-out
- Serial: RS232/422/485 x 2
- Digital: DB9 Female x1 for DI x4 & DO x4 (TTL, DO Max 100ma) - optional
- USB3.0 x 2, USB 2.0 x 4

### Power Input

- +9 to +30 VDC up to 100W
- 1x 2pin terminal block

### Hardware Monitor

- Voltage for Vcore/ VcoreG/V+3.3V/ V+5V;  
Temperature for CPU and System Integrated  
Watchdog Timer 1~255 second settings

### Environmental

- Operating Temp: -10 to +55°C
- Storage Temp: -20° to +70°C
- Relative Humidity: 5% to 95%

### Certifications

- CE, FCC Class A

### OS Support

Windows Embedded, Win7 Pro, Win 10, Linux

### Environmental Standards<sup>1</sup>

- MIL-STD-810
  - Operational Temp., Method 501, Proc. I/II: -10°C to +55°C, capable of -40°C to +71°C with select processors. Storage Temp., Method 501, Procedure I/II: -30°C to +75°C
  - Humidity, Method 507, Procedure II: 240 hours with humidity kit.
  - Altitude, Method 500: 10,000ft operation, 20,000ft transport.
  - Vibration, Method 514, Procedure I: 1.5 GRMS, 5-500Hz, 75 min/axis
  - Shock, Method 516, Procedures I/V: 20g, 11msec; 3 axes, each direction
- Electromagnetic Compatibility Standards<sup>1</sup> FCC Class A
- Mil-STD-461F, with specific kits for air/ship applications
  - Operating Temp: -20 to +55° C (Hi/Lo Tested)
  - Storage Temp: -40 to +70°C
  - Bootable > 24 hrs @ -20°C

Note 1 - Designed to meet

### Additional Storage

- Removable or fixed additional SSD via 2x eSATA

### Options

- GPGPU processing
- DVR

### Ordering Information:

Models: V4/TRUPER/102/109

Contact: US +1.410.384.9181

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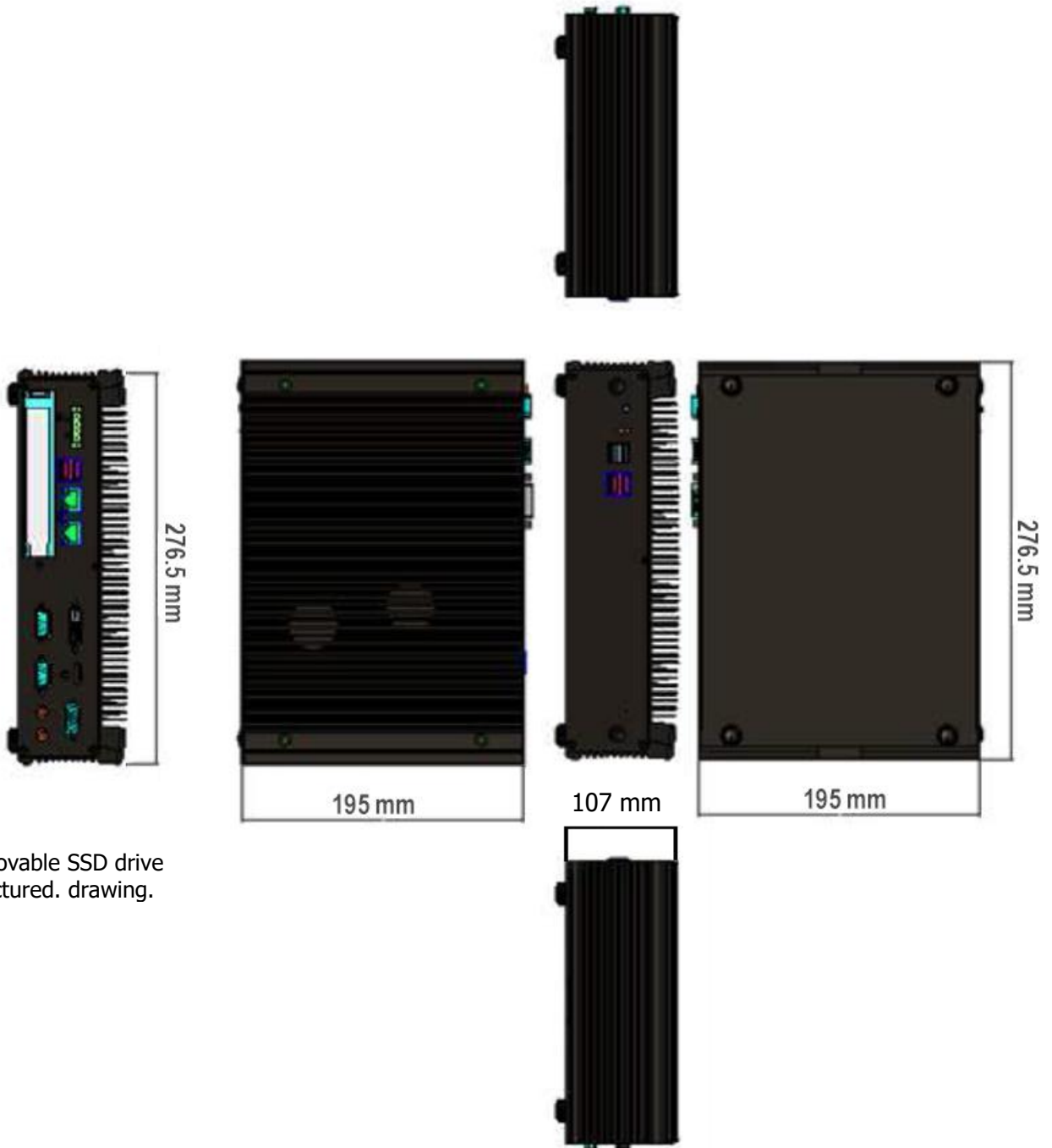


**Footprint**

Dimensions:

276.6 x 110 x 195 mm (10.9" x 4.33" x 7.7")

Weight: 5.7 kg (11lbs)



Note: Removable SSD drive bays not pictured. drawing.

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