

## **NVIDIA AGX ORIN™ RUGGED PC** **MODEL: SD-RPJAGX-64i**

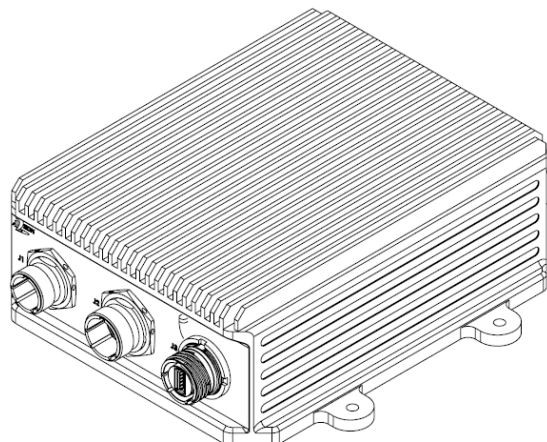


**Rugged Mission Computer platform powered by AGX Orin is ideal solution for wide range of applications for Military, UAV, AGV, Robotics, Transportation for deep learning based edge AI and video processing applications.**

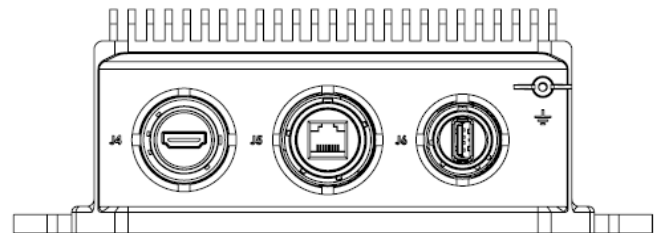
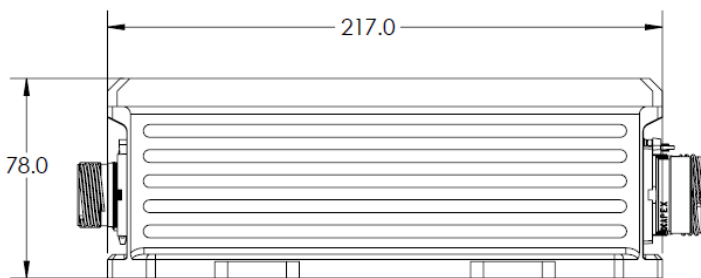
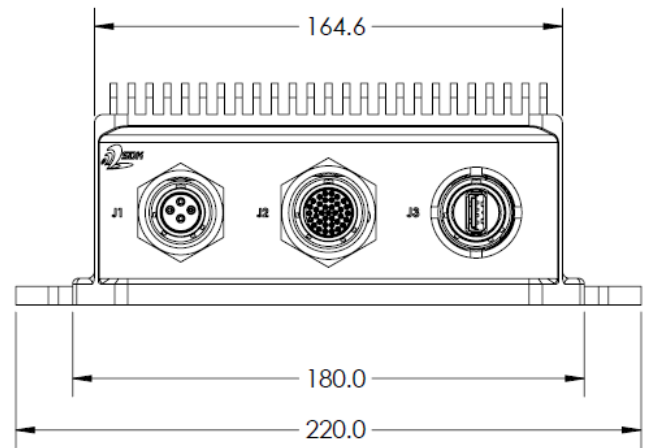
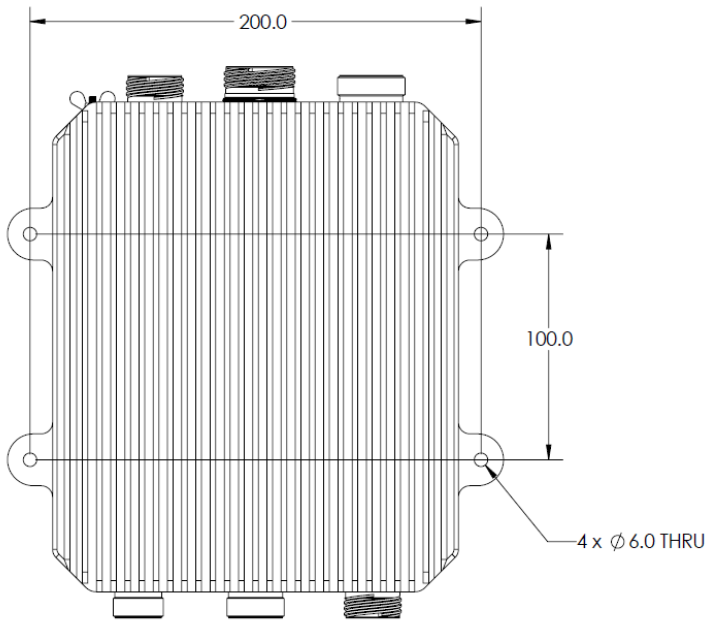


| <b>SPECIFICATIONS</b>                     |   |
|---|---|
| <b>Nvidia Jetson Model</b>                | NVIDIA Jetson AGX Orin 64GB Industrial  |
| <b>GPU</b>                                | 2048-core NVIDIA Ampere architecture GPU with 64 Tensor Cores                           |
| <b>AI Performance</b>                     | 248 TOPS  |
| <b>CPU</b>                                | 12-core Arm® Cortex®-A78AE v8.2 64-bit CPU  |
| <b>Networking options</b>                 | 2x GbE, 1x GbE 1x 10GbE or 2x 10 GbE ports  |
| <b>Memory</b>                             | 64GB 256-bit LPDDR5 (+ ECC) 204.8GB/s   |
| <b>Storage</b>                            | 64GB eMMC 5.1 onboard + NVMe SSD support up to 4TB capacity                             |
| <b>Video Encode</b>                       | 1x 4K60 (H.265) 3x 4K30 (H.265) 7x 1080p60 (H.265) 15x 1080p30 (H.265)                  |
| <b>Video Decode</b>                       | 1x 8K30 (H.265) 3x 4K60 (H.265) 7x 4K30 (H.265) 11x 1080p60 (H.265) 23x 1080p30 (H.265) |
| <b>Camera inputs</b>                      | 8x Total (FPD-Link III)   |
| <b>Deserializer</b>                       | Texas Instruments DS90UB954   |
| <b>MIPI Output</b>                        | A single 4-lane MIPI CSI-2 v1.3 output from each Deserializer (16-lanes total)          |
| <b>USB</b>                                | 2x USB 3.2 Ports  |
| <b>UART</b>                               | 2x @3.3V Levels UART0 and UART1   |
| <b>CAN</b>                                | 2 x CAN 2.0b Port   |
| <b>GPIO</b>                               | 4 bits of 3.3V (level shifted GPIO)   |
| <b>Input Power</b>                        | 18-36VDC  |
| <b>Optional buttons</b>                   | Power, Reset, Recovery  |
| <b>Operating Lifetime</b>                 | 10 years ; 87K hours @ 85° C  |
| <b>Production Lifecycle</b>               | 10 years (until 2033)   |
| <b>Processor Thermal Design Power (W)</b> | 15-40W  |
| <b>Optional Expansions</b>                | WiFi + BT modules   |

| <b>ENVIRONMENTAL</b>          |   |
|-------------------------------|---|
| <b>Operating Temperature</b>  | -40°C to 71°C   |
| <b>Storage Temperature</b>    | -40°C to 85°C   |
| <b>Operating Humidity</b>     | Up to 95% (Non Condensing)  |
| <b>Ingress protection:</b>    | IP67  |
| <b>Operating shock:</b>       | 40g; 11ms   |
| <b>Random vibration:</b>      | 10Hz to 2000Hz  |
| <b>Reliability standards</b>  | MIL-STD-810H compliant  |
| <b>EMI/EMC standard</b>       | MIL-STD-461G compliant  |
| <b>POWER SPECIFICATION</b>    |   |
| <b>Power Input</b>            | 18~36V DC Input,<br>Transient protection MIL-STD-1275/704 compliant |
| <b>Power Consumption</b>      | 15W to 45W depending on the configuration                           |
| <b>MECHANICAL</b>             |   |
| <b>Dimensions (W x H x D)</b> | 180 x 78 x 217mm  |
| <b>Weight</b>                 | 2.4kg   |



# DRAWINGS



\*\*\* Connectors type and layout for reference only ,it can change depend of requested configuration and interfaces.