

# Helium

PCB ARTS

## RUGGEDIZED NVIDIA JETSON EMBEDDED SYSTEM



### Overview

The Jetson based Helium is build for deployments in higher quantities, it has the possibility to choose from different camera interfaces, either FPD or GMSL. Helium is for rugged applications, such as automotive, industrial, mining or aerospace.

- NVIDIA® Jetson™ Orin Nano / NX compatible
- NVIDIA Jetson Orin Supermode supported
- Up to 157 TOPS on Orin NX 16GB
- 2x Gigabit Ethernet Ports (M12)
- 1x USB-C USB 3.2 (10Gbit/s, Screw terminal)
  - For Debugging
  - For Displayport
- Power Input: 12V to 48V
- Internal Storage: 128GB
- Camera Interfaces (one choosable)
  - 4x FPD Link III (12,8 Gbit/s over all ports)
  - 4x GMSL2 (20 Gbit/s over all ports)
- M.2 PCIe Gen 4 x1 Slots WiFi (E-Key) or 4G/5G (B-Key)
- IP 67 Proof
- Operating Temperature -40°C to +85°C
- Extremely small footprint 90 x 85 x 27mm



### Advantages

Small NVIDIA Jetson based embedded System

Passive cooling can be adapted seamlessly

Rugged connectors

Driver of camera partners included

### Further Specifications

- 4x Opto Isolated IO's within Power cable
- IMU ICM-42670-P Inside
- Crypto Chip ATSHA204A inside
- External RTC for longer RTC lifetime
- GMSL Chip MAX96724
- FPD Chip DS90UB960

#### About PCB Arts

We are PCB Arts, a technology enthusiastic team from the heart of Franconia. We support our customers with solutions in the areas of edge AI and electronics development. From the idea to the implementation, we are happy to assist with advice & action.

#### Contact

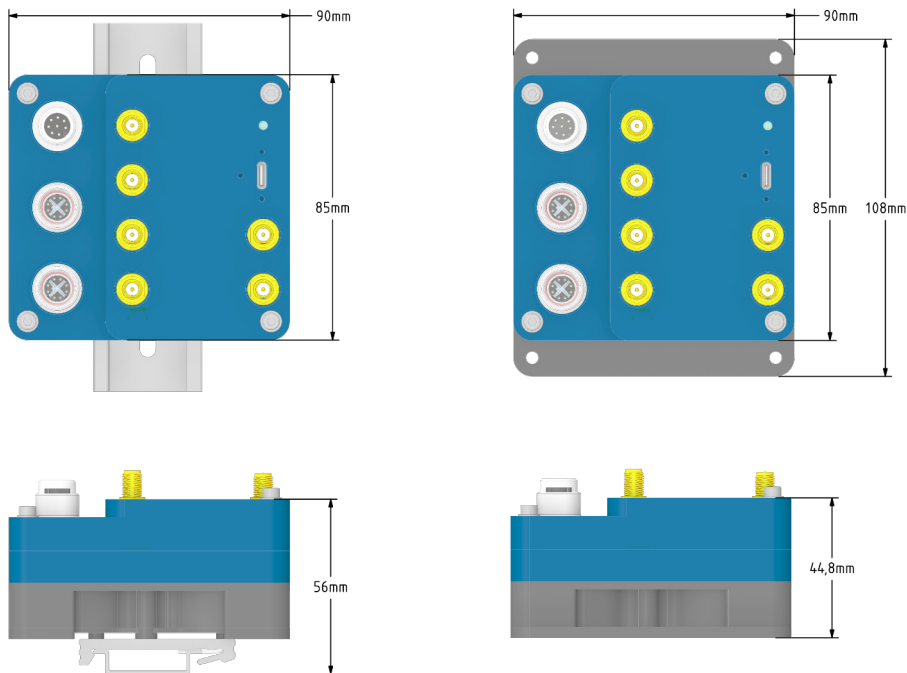
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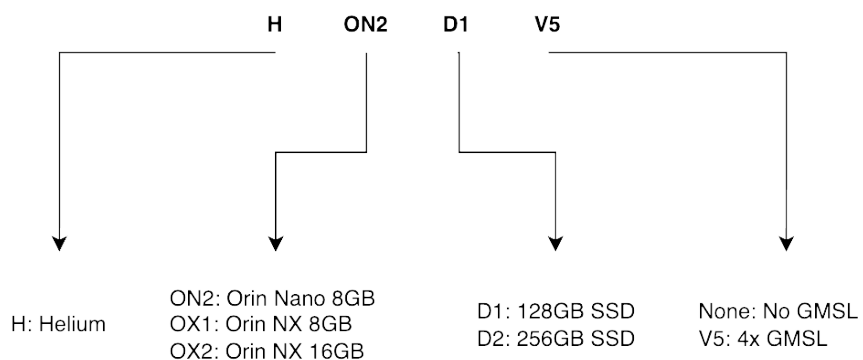
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### Dimensions with active cooling solution



### Ordering Information



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