



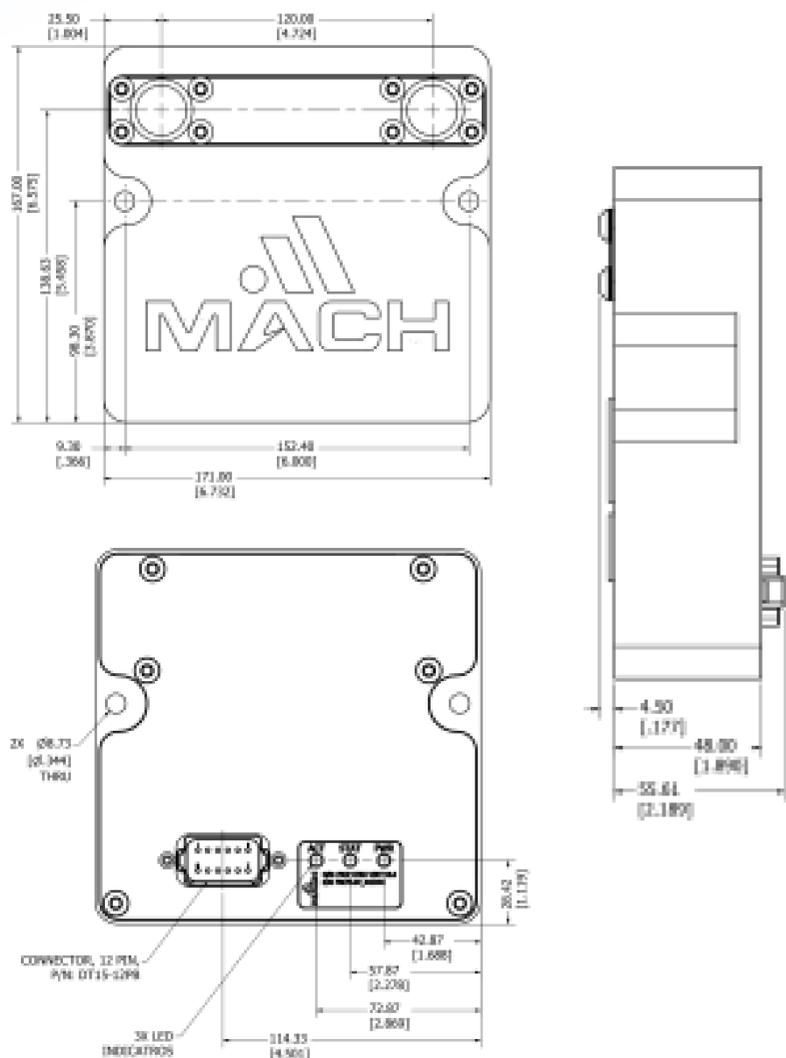
PERCEPTION 3



<https://mach.io/solutions/>

Mach® Perception 3 provides a rugged high dynamic range (HDR) stereo vision platform capable of running Mach or client-specific neural networks via NVIDIA Jetson Orin Nano™. Mach's pre-built functionality includes obstacle detection, row following, and visual odometry and localization. Available with Radar and Lidar sensor fusion, Perception 3 is designed to function efficiently in a wide range of harsh environments, making it ideal for agricultural, construction and industrial applications.

APPLICATIONS



DATA PROCESSING

- ✓ NVIDIA Jetson Orin Nano™
- ✓ Up to 20-40 Int8 TOPs
- ✓ 6 core ARM Cortex A78AE
- ✓ Ampere GPU + Tensor Cores (1024 CUDA, 32 Tensor)

DATA STORAGE

- ✓ Memory: 8GB bit LPDDR5
- ✓ M.2 NVMe SSD
- ✓ Internal IMU

STEREO VISION

- ✓ Dual 1920 x 1536 image sensors, 30 fps
- ✓ Depth point cloud
- ✓ Range: 0.3m-20m
- ✓ FOV: 110° (H) x 90° (V)
- ✓ Dynamic Range: 120dB (HDR)

RUGGED DESIGN

- ✓ Enclosure sealed to IP67
- ✓ Designed to meet MIL-STD-810
- ✓ Operating temperature: -30°C to +70°C (limited by image sensor)
- ✓ Storage temperature: -40°C to +85°C
- ✓ Two form factors for ease of integration

WIRED CONNECTIVITY/IO

- ✓ Input power: 9-32VDC, 3A max
- ✓ CAN
- ✓ Ethernet (100/1000Base-TX)

FEATURES

- ✓ Radar and Lidar options for sensor fusion



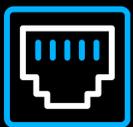
AI POWER

40 TOPs (NVIDIA Orin Nano with Tensor Cores)



PRECISION DEPTH

Sub-Pixel Resolution



CONNECTIVITY

Gigabit (1000 Base-T)



HDR

120dB (High Dynamic Range)