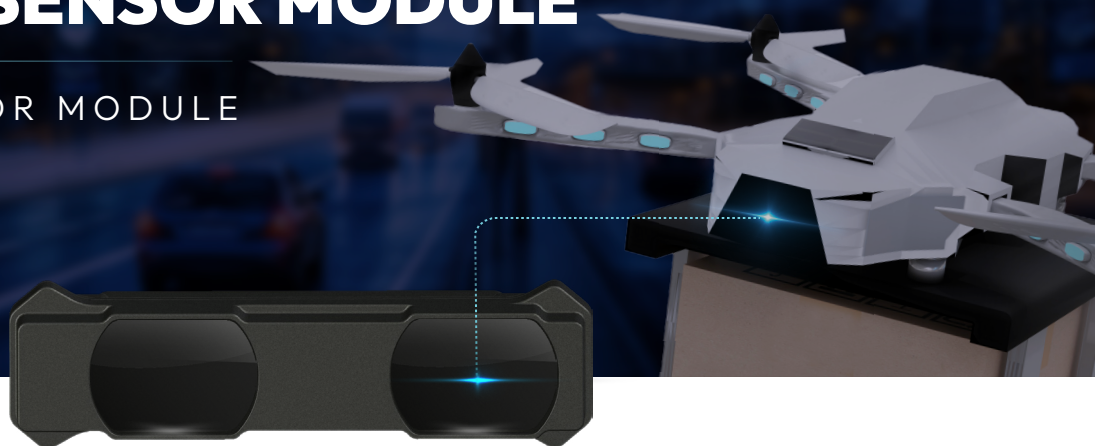




TRACKING SENSOR MODULE

M4.3WN-TS SENSOR MODULE

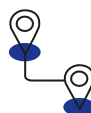


Equipped with the NU4000 Vision-on-Chip processor, Inuitive's M4.3WN-TS tracking sensor module presents a robust solution for visual perception and tracking in autonomous mobile robots. It offers not only a comprehensive visual SLAM solution but also boasts an IP65-rated enclosure for dust and water resistance. By utilizing the NU4000's capabilities, the module efficiently manages all SLAM-related tasks, effectively reducing the workload of the host CPU. This unique combination of features directly addresses the primary challenges faced by any autonomous mobile system.

KEY FEATURES



Wide field of view
Tracking (133°x100°)



SLAM
On-chip or on host



IP65 Standard



VISUAL PERCEPTION REDEFINED

KEY PARAMETERS

GENERAL PARAMETERS

Parameter	Value
Module size – XYZ	126,27,25 mm
Baseline	64mm
Operating temperature range (tested on case; with airflow)	-10 – 50
Weight	< 110 gram
Humidity	90%
I/F	USB 3.0
Improved resilient to vibrations at robotics use case	

InuView SDK

Supported operating systems	✓ Linux	✓ Win	✓ Android
Supported platforms	✓ RoS	✓ Ras-Pi	✓ ARM

TRACKING

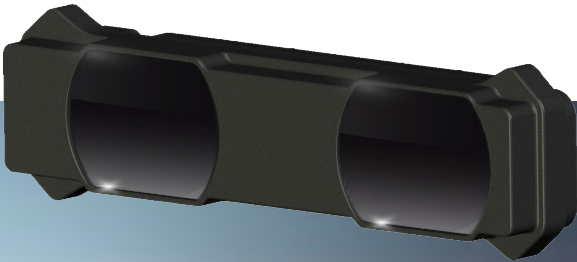
Parameter	Value
Sensor	OV7251
Resolution	640x480
FOV	133°x100°

Inu SLAM Interface:

Parameter	Value
6 Dof tracking (sensor position) stream resolution	4x4 Translation & Rotation matrix
Sensor tracking stats indication	Tracking / Tracking loss
RoS interface	Supported

IMU

Parameter	BM1160
-----------	--------



M4.3WN-TS SENSOR MODULE HIGH LEVEL BLOCK DIAGRAM

