VTK SLAM Kit

Unlock capabilities beyond sensor fusion

MAP NAVIGATION

LOCATION
58.35.22

14.2 km

Vecow

Vecow

Vecow VTK SLAM Kit

VTK SLAM Kit

Simultaneous Localization and Mapping (SLAM) is a powerful technology that plays a crucial role in various industries. Whether you're in robotics, augmented reality, virtual reality, autonomous vehicles, or any other field that involves navigating and mapping unknown environments, SLAM can significantly enhance your capabilities.

Precision Navigation :
Ideal for robotics, drones, and autonomous vehicles,enabling accurate movement in unknown or dynamic environments.
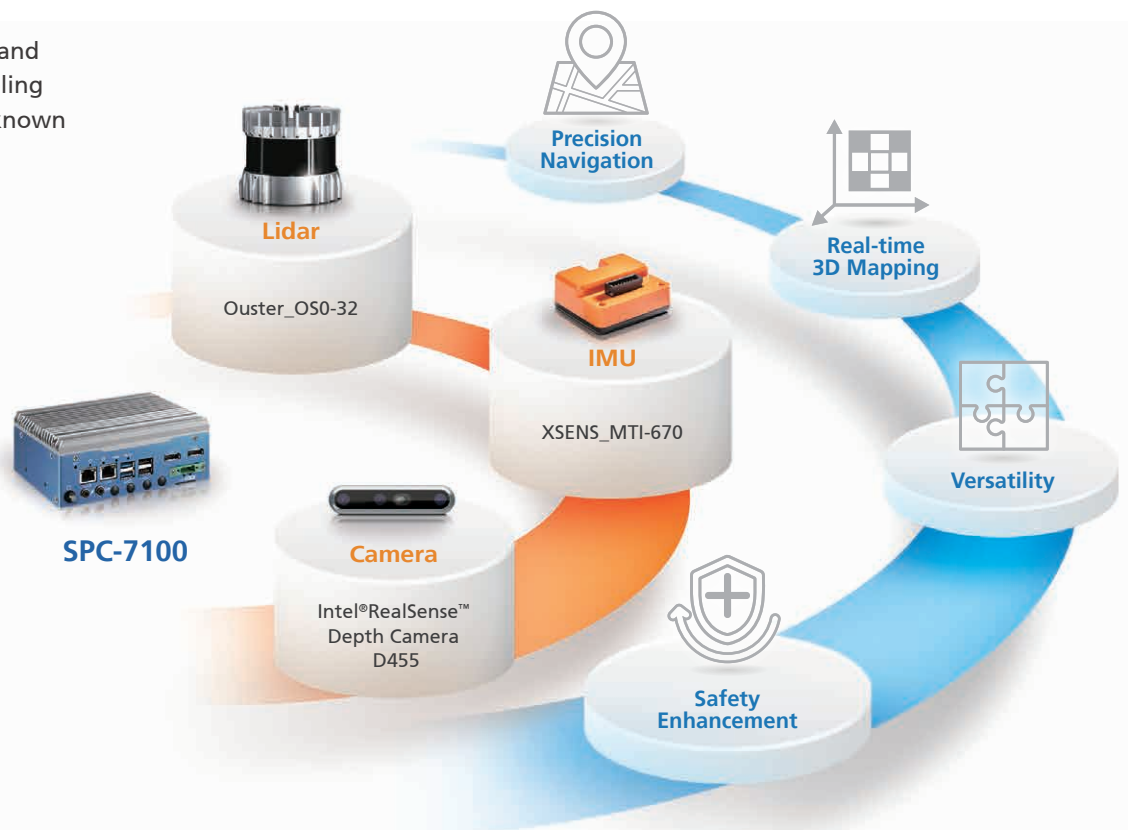
Real-time 3D Mapping :
Creates detailed 3D maps in real-time, crucial for quick decision-making.

Versatility :
Adaptable across industries like manufacturing, public transportation, logistics, and healthcare, meeting diverse application needs.
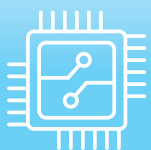
Safety Enhancement :
By providing accurate environmental data for obstacle avoidance keeping asset safe.

Lidar
Ouster_OS0-32

IMU
XSENS_MTI-670

Camera
Intel®RealSense™ Depth Camera D455

SPC-7100

Precision Navigation

Real-time 3D Mapping

Versatility

Safety Enhancement

Ready to use Edge AI Solution

VTK is a turn-key solution product that enables AI applications at the edge, such as traffic vision, surveillance, and factory automation. It enables real-time AI inferencing including video analytics, object recognition, and data processing, empowering businesses to make informed decisions swiftly with precision.

Industrial Grade Comprehensive
Enhanced reliability, durability, and performance providing long-lasting value to businesses.

Hardware Ecosystem
Diverse of hardware and software combinations suitable for all application scenarios.
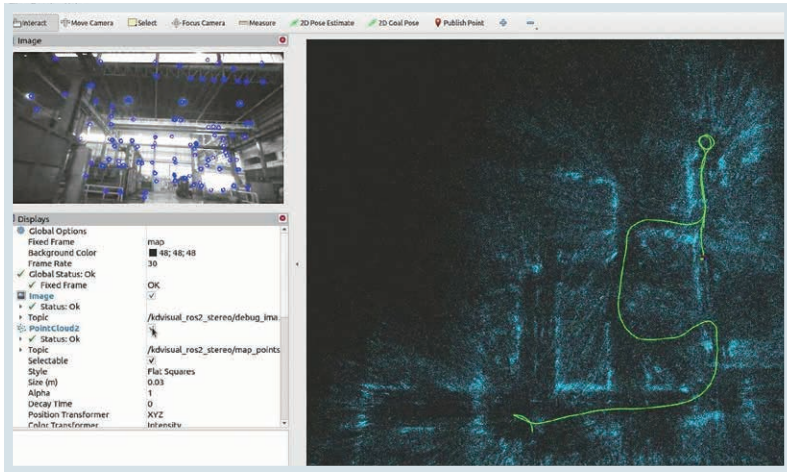
Easy Deployment
Ready to use system integrated AI platforms with pre-trained models and tools.

Enterprise Reliability
User friendly, seamless and dependable operations for your business.

Application Scenario

Mapping

· Flexible sensor setup integrates seamlessly
  with GNSS for precise mapping.
· VTK excels in generating accurate point clouds
  in any environment.
· Faster time-to-market and broader
  effectiveness with GNSS compatibility.
· Real-time processing and Lidar flexibility
  enhance productivity in mapping with VTK SLAM.

Machine Learning

· ML uses SLAM Map data for analysis and decisions.
· SLAM Maps provide high-quality data for
  ML model training.
· ML algorithms adapt with SLAM Map
  insights for real-time decisions.
· SLAM Map data access speeds ML model
  development

Fleet Management

· Independent vehicles maintain accurate navigation
  using a single SLAM map.
· Shared SLAM map ensures consistent positioning
  for multiple vehicles.
· Vehicles collaborate effectively with a common
  SLAM map, enabling coordinated tasks.
· Sharing SLAM maps optimizes resources, increasing
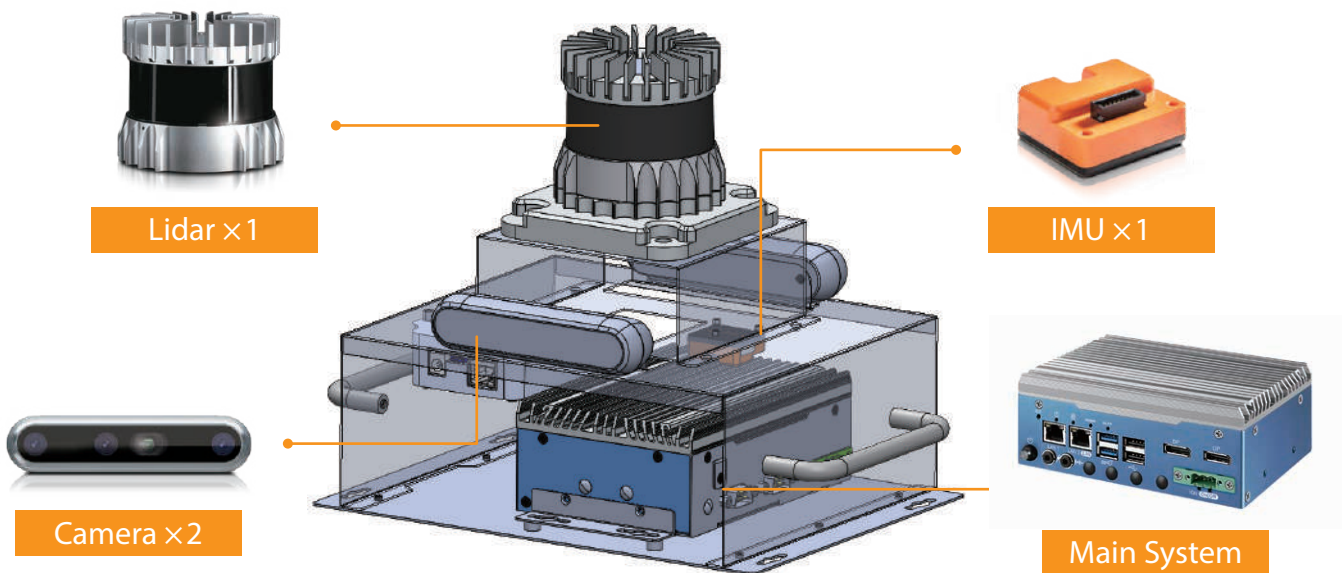 efficiency and reducing costs

IOT

· VTK SLAM allows real-time collaboration on a shared
  cloud map for efficient warehouse management.
· Support for diverse devices and use cases on
  one map streamlines operations.
· Gain insights into traffic and robot locations,
  optimizing warehouse initiatives with live data.
· Simplify mapping and enhance efficiency in
  smart warehouses with VTK SLAM.

Product Specification
For Standard VTK SLAM Kit, We provide…

Lidar ×1

IMU ×1

Camera ×2

Main System

SPC-7100

- High-Performance Fanless System
- Intel® Core™ i7/i5 Processor (Tiger Lake UP3)
- DDR4 SO-DIMM 3200MHz 32GB
- Dual DisplayPort display, up to 4K resolution
- Linux
- 2 USB3.2 Gen1

Intel®RealSense™ Depth Camera D455

- Global shutter for both RGB and depth sensors
- Depth accuracy of <2% at 4m
- Compact form factor
- High-resolution RGB sensor (1 MP)

Movella XSENS MTI-670

- Small, IP51-rated GNSS/INS
- 0.2 deg roll/pitch & meter level position accuracy
- Connects to external GNSS receiver

Ouster OS0-32

- Fixed resolution per frame
- Camera-grade near-infrared and intensity data
- Multi-sensor crosstalk immunity
- Introducing Dual Return Mode

kudan

- Leading localization and mapping tech for precise tracking indoors and out.
- Replaceable sensor; customize configurations for evaluation
- Perpetual software license; unlimited kit usage
- Reliable position tracking for faster product development.

Kudan SLAM Software (Lidar + Visual)

We support custome hardware configuration and AI applications, please contact Vecow at sales@vecow.com for more detail.