FIXPOSITION
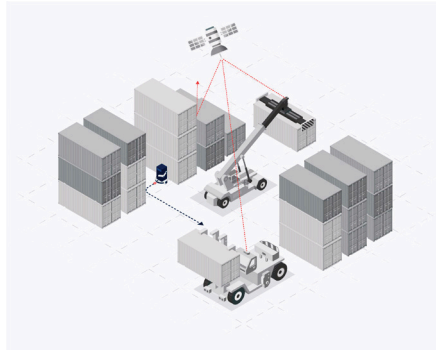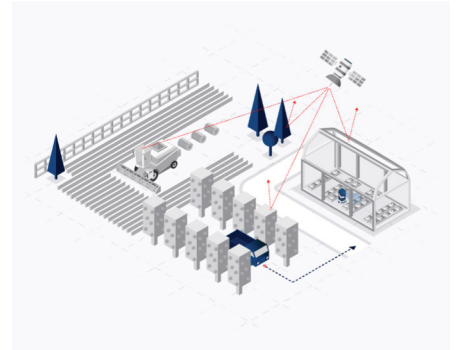## Precise global positioning everywhere™

THE GNSS CHALLENGE

GNSS fails under bridges and near tall buildings

GNSS degrades near large structures

GNSS degrades near trees and in greenhouses

OUR UNIQUE SOLUTION

Vision-RTK 2 ➕ SWISS MADE

Built for precise positioning in GNSS degraded and denied areas

The Vision RTK-2's proprietary deep sensor fusion technology provides reliable and precise real-time global positioning that enables autonomous navigation systems to operate in a multitude of GNSS challenging environments.

Real-time and highly-accurate global positioning

Seamless integration for fast market entry

Off-the-shelf solution ready for evaluation

Compact and lightweight solution

WATCH OUR PRODUCT PERFORMANCE VIDEOS

🌐 www.fixposition.com
✉ sales@fixposition.com

📍 Zurich, Switzerland.

Technical details

Maximum output rate	100Hz
Positioning accuracy (RTK Fix only)	1.0 cm + 1 ppm R50
Heading accuracy	0.4° (1 m baseline)
Velocity accuracy	0.1 m/s
Maximum velocity	22 m/s
Position error as % of distance traveled in GNSS outages	0.75 %[1]
Acquisition time	25 s (cold start)

[1] RMS in automotive mode with good wheel odometry input

Communication and configuration

Data formats	NMEA, ROS1, ROS2, Fixposition messages, others
Operation modes	Automotive, Generic, Lawnmower, Ground robot
RTK correction format	RTCM3
Data interfaces (input/output)	UART, TCP, CAN
Time synchronization	PPS, PTP, NTP

Hardware

Dual RTK receivers	Supported GNSS constellations · GPS/QZSS (L1C/A, L2C) · Galileo (E1B/C, E5B) · BeiDou (B1I, B2I) · GLONASS (L1OF, L2OF)
Camera	CMOS with global shutter, 120° DFOV
IMU	Accelerometer and gyroscope
Internal storage	16 GB flash memory

Interfaces

Wired inputs/outputs	2x UART, CAN, Ethernet, USB-C
Wireless	Wi-Fi 802.11 ac/a/b/g/n
GNSS antenna connector	2x SMA
Camera inputs	2x MIPI CSI-2

Electrical specifications

Supply voltage range	5-36 V DC
Typical power consumption	10 W

Mechanical specifications

Dimensions (L × W × H)	114 × 129 × 30 mm
Weight	420g

Environmental specifications

Operating temperature	–30°C to +85°C
Certifications	IP66 - water and dust resistance

Rev.5_D03