

**OSEANLAND
INDONESIA**

**COMPANY
PROFILE**

| We Provide You Better



Table of **Contents**

2	About Company
3	Our Commitment
3	Our Vision and Mission
4	Our Team
5	Our Solution
6	Aerial Solution
14	Drone Bathy Solution
17	Geospatial Solution
25	Controller
27	Marine & Hydrography Solution
43	Software & License Solution
54	Our Project Portfolio
62	Our Valuable Customers



About COMPANY

PT Oseanland Survei Indonesia is a provider of technology solutions and services in the fields of Geospatial, LiDAR, and Hydro-Oceanography. We deliver high-quality results and products that are comprehensive and affordable through an Experience & Expertise Team with over 10 years of experience.

Oseanland Made Solutions For Your Work

Our solutions include both hardware and software, providing a system that can control the machine in an easy and intuitive way. The project can be created in the office and then easily transferred to field instruments.

Our COMMITMENT



We will provide you **1 year warranty** with replacement for a new product.



We will provide you the best experience and technology through **Technical Assistance** for the products or services purchased.



We will provide you **Satisfaction** through our services.

Our VISION

Be the top company in Indonesia as a **provider of smart solutions** in the fields of Geospatial, LiDAR and Hydro-Oceanography technology.

Our MISSION

We provide comprehensive **smart technology solutions** to enrich the experience and productivity of users that require accurate, fast and precise 2D / 3D positioning solutions.



Our TEAM



**M. JIMMY
DEKHA S**
Chief Executive Officer



**GIAN
NUGRAHA**
Chief Operating Officer



**GIRI IRYAN
KUSNADI**
Geospatial Experts



**INDRA
NUGRAHA**
LiDAR Experts

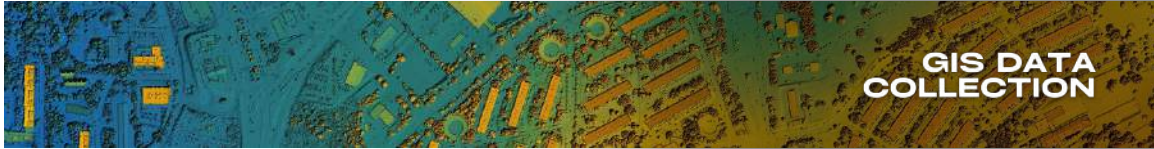


**BAGUS
PRADISTYO**
Marine Hydro Oseonagrafi Expert

Our SOLUTIONS

OSEANLAND MADE SOLUTIONS FOR YOUR WORK

Our solutions are designed to facilitate field work in various sectors. They can be used for the precision positioning of machines in construction sites and mines, to help those who work in precision agriculture. We also develop solutions for the marine sector, and also will make it easier to monitor water quality and quantity.





AERIAL SOLUTIONS

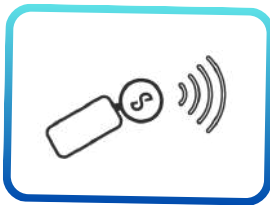
HOVERMAP SERIES

by EMESENT

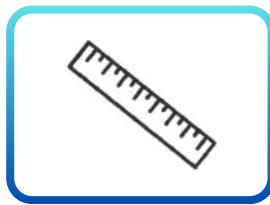


All Hovermaps in the ST product range are designed with the tough, lightweight, IP65 weather sealed design giving you the confidence to capture harsher areas. The award winning Wildcat SLAM solution and Emesent autonomy algorithms ensure safety for the drone and asset, even in hazardous, GPS-denied environments.

WHY CHOOSE HOVERMAP?



FAST TIME TO INSIGHT



SURVEY-GRADE ACCURACY



UNIQUELY VERSATILE



SUPERIOR DETAIL

TYPE ST	MAPPING SPECIFICATIONS	TYPE ST-X
----------------	-------------------------------	------------------

0.40 to 100 m (1.3 to 330 ft)

LIDAR RANGE

0.50 to 300 m (1.6 to 984 ft)

± 20 mm (3/4 in) in general environments
± 15 mm (19/32 in) in typical indoor and underground environments
± 5 mm (7/32 in) isolated change detection capability

MAPPING ACCURACY

± 15 mm (19/32 in) in general environments
± 10 mm (3/8 in) in typical indoor and underground environments
± 5 mm (7/32 in) isolated change detection capability

16

LIDAR CHANNELS

32

Single Return Mode: up to 300,000 points/sec
Dual Return Mode: up to 600,000 points/sec

LIDAR DATA ACQUISITION SPEED

Single Return Mode: up to 640,000 points/sec
Multi Return Mode (3 return): up to 1,920,000 points/sec

512 Gigabytes – approximately 8 hours of sensor data

STORAGE

512 Gigabytes – approximately 4 hours of sensor data

PHYSICAL SPECIFICATIONS



1.6 kg (3.5 lb)

WEIGHT

1.57kg (3.4 lbs)












UgCS Airborne GPR

GROUND PENETRATING RADAR (GPR) FOR DRONE

GPR+drone integrated system enables to see through the surface of the ground, ice, rocks, freshwater at unsafe and hazardous environments without compromising the safety of staff, providing an additional solution for more efficient surveying.



WHY USE GPR WITH DRONE?

 Acquire Data Faster	 High Accuracy Measurements	 Precision	 Cost-efficient
 Increased staff safety	 Automated flight Drone ensures higher accuracy	 Accessibility Location not reachable by foot can be reached by drone	


Geometrics MagArrow


UAS Deployable Magnetometer


The Magarrow II is the second-generation, high-performance magnetometer specifically designed for deployment on Unmanned Aerial Vehicles (UAV).





FEATURES & BENEFITS


 **Lightweight**
Weighs only 1 kg, allowing a flight time

 **UAV Agnostic**
Can be easily attached to your existing enterprise UAS.

 **High Quality Data**
Peace of mind

 **Super-Fast Sampling Rate**
Fly faster, up to 10 m/s with samples every 1 cm. Filter out UAS motor noise.

 **Long Battery Life**
2 hours of battery life will outlast multiple UAS flights. Hot swappable.

 **Self-Contained**
GPS, storage, and WiFi on board. No connection to UAS needed.

FIXAR 007

Fixed Wing Drone Solution



COST-EFFECTIVE DRONE SOLUTION FOR COMMERCIAL OPERATIONS

Combining unique traditions in aviation, electronic, and software engineering, FIXAR's in-house R&D department has developed a dynamic and technologically advanced UAV in the market. At FIXAR all the UAV solutions starting with the aircraft design and manufacturing to the related hardware and software are all designed, developed and produced in our company in Europe. With an innovative and convenient VTOL design, the FIXAR 007 is both rugged and versatile, making it an excellent solution for multiple applications.

WHY FIXAR?



MAXIMIZED EFFICIENCY

- Cost savings up to 35% compared to other drone solutions on market
- Innovative & proven technology to gain the competitive edge
- Up to 60 min flight time and 2 kg (4.4 lbs) payload capacity
- High maneuverability
- Extreme resistance to severe weather conditions



END-TO-END INTEGRATED SOLUTION

- Ready-to-fly , all-in-one solution
- Swappable payload module ensures FIXAR 007 can be used for multiple tasks
- Easy to operate: 2 minutes and 9 clicks to launch a mission
- 12-month/ 80 flights warranty period and world-class technical and operational support



RELIABLE TECHNOLOGY

- Robust control and fail-safe operation with proprietary Autopilot
- Autonomous take-off & landing even over unstructured terrain
- Protection from strong electromagnetic fields
- Free from bulky launchers or capture devices
- Approved for BVLOS flights



DJI ZENMUSE H20N

Vision Beyond Darkness.

"N" for Night Vision

The **Zenmuse H20N** integrates starlight sensors into its zoom and wide-angle cameras. Pair this with dual zoom thermal cameras and a laser rangefinder, and you have a versatile hybrid payload that rises to the occasion.



Starlight Night Vision



640x512 Dual Thermal Cameras 2x, 8x Optical Zoom



20x Hybrid Optical Zoom



Laser Rangefinder 1200m Max Range



Synchronized Split-screen Zoom



Intelligent Night Scene Enhancement



IP44 Rating



-20°C to 50°C Operating Temperature



DJI ZENMUSE P1

Efficiency through Flexible Full-frame Photogrammetry

The **Zenmuse P1** integrates a full-frame sensor with interchangeable fixed-focus lenses on a 3-axis stabilized gimbal. Designed for photogrammetry flight missions, it takes efficiency and accuracy to a whole new level.



Accuracy without GCPs 3 cm horizontally / 5 cm vertically



High Efficiency 3 km² covered in a single flight



45 MP Full-frame Sensor



3-axis Stabilized Gimbal Smart Oblique Capture



Global Mechanical Shutter Speed 1/2000 Seconds



TimeSync 2.0 - synchronization at the microsecond level

DJI ZENMUSE L2

Powerful Range, Elevated Precision

Zenmuse L2 integrates frame LiDAR, a self-developed high-accuracy IMU system, and a 4/3 CMOS RGB mapping camera, providing DJI flight platforms with more precise, efficient, and reliable geospatial data acquisition. When used with DJI Terra, it delivers a turnkey solution for 3D data collection and high-accuracy post-processing.



High Precision



Exceptional Efficiency



Superior Penetration



Detection Range



5 Returns



Turnkey Solution



Point Cloud LiveView



One-Click Processing on DJI Terra



BEST SELLER

MATRICE 350 RTK

Fully Powered to Forge Ahead

An upgraded flagship drone platform, the Matrice 350 RTK sets a new benchmark for the industry. This next-generation drone platform features an all-new video transmission system and control experience, a more efficient battery system, and more comprehensive safety features, as well as robust payload and expansion capabilities. It is fully powered to inject innovative strength into any aerial operation.



55-Min Max Flight Time



IP55 Rating



DJI O3 Enterprise Transmission



DJI RC Plus



400 Battery Cycles



6-Directional Sensing & Positioning



Night-Vision FPV Camera



Multi-Payload Support

Effortlessly Powerful Flight Performance

Built tough, the Matrice 350 RTK features powerful propulsion, enhanced protection rating, and excellent flight performance, allowing it to effortlessly tackle a wide variety of challenges.

MATRICE 30 SERIES

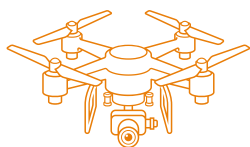
Power in Portability



Matrice 30

Matrice 30T

Ready, when you are, to overcome the unknown



Unique aerial intelligence to capture everything



Reliable in the harshest of environments



Portable to go wherever you go

Powerful Flight Performance

A balance of power and portability delivers higher operational efficiency

41-min

Max Flight Time

12 m/s

Wind Resistance

7000 m

Service Ceiling

23 m/s

Max Speed

XFLY LIDAR SOLUTION

Accurate & Reliable



XFLY series integrates high performance Inertial Navigation System with camera and LiDAR for point cloud generation. Different customer's need can be met by the choice of Hesai LiDAR XFLY120, XFLY300 or other sensors.

The processing platform contains a Wi-Fi interface, an embedded cellular modem for RTCM corrections, data logging software and a gigabit Ethernet network.

Equipped with a high-performance INS, it delivers clean point clouds even at high AGL. As a small, lightweight and low-power system, it allows the user to fly longer, adapting to the needs of any project. The post-processing software provides fully automatic point cloud generation.

200M AGL

Fly up to 200 meter above ground level.



ACCURACY

Thanks to high performances GPS-Aided INS, 3-5 cm point cloud accuracy can be achieved.



CAMERA

24 MP camera adds RGB information to the data. Camera comes to the customer already calibrated and with these boresighting values already saved onto the device.



FLY & DRIVE

Different mounts are offered to support the assembly onto well-known UAVs and other platforms, like cars.



PPK/RTK DUAL/SINGLE GNSS

Depending on customer's application, choose whether you want single or dual GNSS antenna. For who wants to avoid post processing, Real Time Kinematic solution is also available.



TOPODRONE 200+

Affordable Accuracy



Laser scanner based on Hesai XT32M2X, 300 m working range, 200 m working flight altitude, triple return mode up to 1,920,000 points per second, 3-5 cm XYZ accuracy, 360° FOV, built-in 200 Hz IMU with 0.07/0.01 accuracy, built-in GNSS receiver, weight 0.8 kg.

- The **Most Compact** 360° LiDAR on the market. ✓
- The **Lightest** LiDAR of the product line - 800 g. ✓
- The **Highest** working flight altitude - 200 m. ✓
- Triple** return mode, the others have dual return. ✓
- Highest** scanning frequency - 1 920 000 PPS. ✓



Affordability

We work hard to provide the lowest prices for LiDARs in its class.



Performance

Covers over 2 sq. km. of territory in one flight from a 200 m altitude.



Accuracy

Very precise and thin point cloud due to modern laser sensor, built-in high precision IMU and integrated GNSS receiver.



Mobility

LiDAR 3 in 1: can be mounted not only on the drone, but also on a car and a surveying backpack.



Autonomy

Completely autonomous LiDAR missions when mounted on the DJI Matrice 300 RTK.



Software

Provides full processing cycle from trajectory calculation to point cloud generation with the required coordinate system, strip adjustment and SLAM algorithms for data processing in conditions of insufficient GNSS signal are supported.



Integration

The laser scanner can work on any drone, is fully compatible with TOPODRONE P24 and P61 photogrammetric cameras, the camera can be connected to the laser scanner, a fixed installation on LiDAR, as well as an option with installation of the camera on a 3-axis gimbal.



TOPODRONE PT61

3 in 1 camera :
Multispectral + RGB + Thermal

TOPODRONE PT61 is a lightweight and functional 3-in-1 camera for photogrammetry, multispectral imaging and thermal mapping. The resolution of the RGB sensor is 61 Mp, the multispectral images have 12 Mp resolution after data processing and the thermal imaging resolution is 640x512.



Advantages



**Full-frame camera
with mechanical
shutter**



**Lightweight custom
modification**



**High-precision
PPK integration**



**Multispectral
Lens Option**



**Photogrammetry
with 3-axis
gimbal**



**LiDAR
integration for
colorizing**



**M350/M300 full
compatibility and
remote control**



**Integrated
Thermal Imager**



**Integrated
GNSS and IMU
(optional)**



DRONE BATHY SOLUTIONS

NERO POLI WATER SAMPLER

Multi-bottle payload with live temperature readings.



Nero Poli is Nero's most extensive water sampler yet, allowing you to secure up to 4 separate samples while receiving live temperature readings of sampling locations, all by using Nero Poli's intuitive standalone remote control.



Designed to be compatible **DJI's Matrice 300** and **Matrice 600** drones out of the box or can be easily adapted to mount under most drones on the market.

Features:



ECT D052S

DUAL-FREQUENCY

Precision dual frequency echosounder for deep water

The EchoLogger ECT D052S is a high-quality dual-frequency echo sounder that comes equipped with a tilt and temperature sensor. The package also includes a durable harness, housing, and mountings that are compatible with DJI drones.

With its advanced features and reliable performance, the EchoLogger ECT D052S is the perfect tool for underwater mapping and exploration.



Acoustic frequency:
50/200 kHz



Tilt sensor: Integrated, Dual-axis (Roll & Pitch) $\pm 90^\circ$



Temperature resolution: 0.1°C



Temperature accuracy: 0.5°C (-10°C ~ +50°C)



Inclination data accuracy: 0.1



Altimeter Range Resolution : 1.0 mm



Ultra compact: 56mm dia. x 80mm length



Serial interface: RS232 / RS485





GEOSPATIAL SOLUTIONS



STONEX GNSS + SERIES



S850+ GNSS Receiver

Equipped with an advanced 1408-channel GNSS board and capable of supporting various satellite constellations. The advantages of portability and speed of operation make the S850+ GNSS receiver particularly suitable for field work in areas with complex terrain.

S900+ GNSS Receiver

Stonex S900+ is equipped with a high-performance GNSS board with 1408 channels and can support multiple satellite constellations: GPS, GLONASS, BEIDOU, GALILEO and QZSS. Through the 4G GSM modem, a fast Internet connection is guaranteed for receiving correction data and carry out precise and accurate surveys.



S990+ GNSS Receiver

Stonex S990+ is a 1408-channel GNSS receiver featuring characteristics that improve survey performance in the field. The S990+ receiver is equipped with all major connectivity features: Bluetooth, Wi-Fi, UHF radio and 4G modem.

S980+ GNSS Receiver

The color touch display and the ability to connect an external antenna make the S980+ an extremely effective receiver, capable of detecting GPS, GLONASS, BEIDOU, GALILEO and QZSS constellations, making it suitable for any job.



S631

GNSS SMART ANTENNA

S631 Multi-Frequency Multi-GNSS Smart Antenna

The Hemisphere S631 is a multi-GNSS, multi-frequency smart antenna from Hemisphere. It provides robust performance and high precision in a compact and rugged package. The S631 receiver is powered by Athena™ RTK technology. With Athena™, S631 provides state-of-the-art RTK performance when receiving corrections from a static base station or network RTK correction system. With multiple connectivity options, the S631 allows for RTK corrections to be received over radio, cell modem, Wi-Fi, Bluetooth, or serial connection. S631 delivers centimeter-level accuracy with virtually instantaneous initialization times and cutting-edge robustness in challenging environments.

✓ Multi-frequency GPS, GLONASS, BeiDou, Galileo, QZSS, IRNSS, and Atlas L-band

FEATURES

✓ UHF (400 MHz & 900 MHz), cellular, Bluetooth, and Wi-Fi wireless communication

✓ Long-range RTK baselines up to 50 km with fast acquisition times

✓ Internal sensor corrects collected point coordinates to within 2 cm



✓ Athena GNSS engine providing best-in-class RTK performance

CORS

GNSS Reference Station

High Quality and Performance GNSS Reference Receivers

STONEX CORS stations meet the highest demands for reliability and work in the toughest environments. Professionals put them to work on any type of GNSS applications, from campaign and permanent single base stations to RTK networks, from structural monitoring to offshore positioning, or from atmospheric research to seismic studies.



SC200

GNSS Receiver for Reference Station

- Satellite: GPS, GLONASS, BEIDOU, GALILEO, QZSS, IRNSS, SBAS
- 400+ Channels
- High Precision Static Surveying

SC600+

CORS and RTK Rover Receiver

- Satellite: GPS, BEIDOU, GLONASS, GALILEO, QZSS, SBAS
- 1408 Channels
- High Precision Static Surveying



SC400A

GNSS CORS Receiver

- Satellite: GPS, GLONASS, BEIDOU, GALILEO, QZSS, IRNSS, SBAS
- 800 Channels
- L-Band: Atlas H10 / H30 / Basic (optional)
- High precision Static Surveying



GNSS ANTENNAS

High Precision Antennas for all Survey Works

These antennas capture signals from multiple GNSS constellations, ensuring strong reception even at low satellite elevation angles. With high gain, wide beam width, and rotation insensitivity, they simplify installation and guarantee reliable performance.



BEST TECHNOLOGY

X120GO LASER SCANNER

3D Handheld Laser Scanner.



This laser scanner has a 360° rotating head, which can generate a 360° x 270° point cloud coverage. Combined with the industry-level SLAM algorithm, it can obtain high-precision three-dimensional point cloud data of the surrounding environment without light and GPS.

Equipped with three 5MP cameras to generate a 200°FOV horizontal and 100°FOV vertical, capable of synchronously obtaining texture information and producing colour point clouds and partial panoramic images.


RAPIDITY & REDUCED WORKLOAD

No more multiple scan station, just move around the scene to collect the entire 3D point cloud, without time-consuming cloud to cloud alignment. Download the full data right after the capture.


AUTOMATIC CONTROL POINT MEASUREMENT

When capturing data, X120GO is able to collect reference points too. They can be matched with known control points to georeference the scans.


INTEGRATED CAMERAS

Three integrated 5MP cameras are able to cover the wide field of view of the scanner, obtaining coloured point cloud and panoramic images.


FLEXIBILITY

Combine indoor & outdoor data, even in the most demanding environments.


REALTIME PREVIEW

See your scanning progress in real time using the dedicated Android App.

PERFORMANCE

Max Range	120 m
Min Range	0.5 m
Relative Accuracy	Up to 6 mm ¹
Vertical Resolution	16 channels
Scanning Point Frequency	320.000 pts/s
Field of View	360°x270°
Laser Class	Class 1
Echo Strength	8 bits

CAMERA

N° of Camera	3 (5 MP each - total 15 MP)
Cameras FOV	200°x100°
Image	Semi-spherical
RGB Point Cloud	Supported

SYSTEM

Memory	32GB (expandable)
Operation Mode	Realtime visualization (Android [®])
Communication	NFC, WI-FI
Postprocessing	GOpost software ³

ELECTRICAL SPECIFICATION

Supply Voltage	20-30V
Operating Time	2.5h (1 battery set - 4 batteries)
Capacity	3350mAh x4

PHYSICAL SPECIFICATION

Weight	1,6 kg (without battery)
Size	372 mm x 163 mm x 106 mm
Operating Temperature	-10°C to +45°C (14°F to 113°F)
Operating Humidity	<85% RH
Waterproof/Dustproof	IP54

X100 LASER SCANNER

3D Handheld Laser Scanner.

X100 is a small and compact terrestrial laser scanner that is quick and easy to use. Its multi-line lidar technology and ability to achieve complete coverage of the surrounding area enable it to calculate 3D models for a wide range of applications and scenarios, both outdoors and indoors.



The scanner comes with its own X100app field app, making it easy to control the device. Thanks to the scan converter, the data is compatible with Cube-3d and Stonex Reconstructor, as well as third-party software.

The X100 is the perfect tool for quick topographic surveys, scans of building facades and data collection for floor plans; a quick 360° scan takes as few as 45 seconds. The built-in panoramic camera allows you to add true colour to your scans.



SMALL AND LIGHT

The scanner can be easily used by a single person thanks to its small size and weight of approximately 3 kg.



WIRELESS CONTROL

Through the dedicated APP it is possible to control the device remotely. Scan with one click and check quality via real-time preview



PANORAMIC HDR CAMERA

Add colour to your scan.



SELF CALIBRATING

± 5 degrees tilt supplement angle for precise leveling. Monitor scanner leveling via electronic bubble available on the app.



FAST SCAN & DOWNLOAD

A 360° one-stop scan requires only 45 s. Data are saved on USB dongle directly. Post-processing begins after field work!

LASER

Max Range	120 m
Min Range	0.5 m
Vertical Resolution	16 channels
Scanning Point Frequency	320.000 pts/s
Scan Principle	ToF
Field of View	Horizontal 360° Vertical 268°
Laser Class	Class 1
Wavelength	905nm

PERFORMANCE

Measuring Mode	2 modes: Normal and High
Collection Time	From 45s to 225s
Relative Accuracy	Up to 6 mm ¹
Resolution	6 mm @10 m
Dual axis tilt compensation	± 5°

CAMERA

Dimension	66 mm x 22.5 mm x 160 mm
FOV	360°
Resolution	18MP (6080x3040)
Management	Integrated in X100app

SYSTEM

Data Storage	U-Disk 64GB
Operation Mode	Realtime visualization (Android 10 or above)
Communication	WI-FI

ELECTRICAL SPECIFICATION

Power Consumption	28W
Operating Time	6h (2 batteries - 3h each) ²
Capacity	25700mAh x2

PHYSICAL SPECIFICATION

Operating Temperature	0°C to +40°C (+32°F to +104° F)
Storage Temperature	-20°C to +60°C (-4°F to +140° F)
Waterproof/Dustproof	IP54
X100 Weight	3.2 kg
X100 Size	125 mm x 113 mm x 275 mm
Case Weight	3 kg
Case Size	428 mm x 350 mm x 230 mm
Tripod Weight	1.92 kg
Tripod Height	1.5 m

STONEX TOTAL STATION



R20 Total Station

Precise, efficient and easy Total Station

The R20 range features three models with varying angular accuracy and Bluetooth connectivity, suitable for construction and mapping tasks with user-friendly interfaces.



R25/R25LR Total Station

High Precision Total Station

Now with Endless Friction Drives and Trigger Key Stonex R35/R35LR series is the most customizable Total Station of the market.



R35/R35LR Total Station

High Precision Total Station

Stonex R35/R35LR customizable, 2" accuracy, 600/1000 m range. User-friendly with diverse software options for precise data collection and topographic surveys.



R60 Android Total Station

Total Station with Android on board

The R60 is a device with a 5.5-inch touch screen and the Android operating system, which provides users with a smartphone-like experience in terms of ease of use and familiarity.



R80 Motorized Total Station

Motorized Total Station for high-precision works

R80 combines the power of a Total Station and the capabilities of a remote control. The monitoring of large and small structural works has never been so simple and accurate.



R180 Robotic Total Station

High precision Robotic Total Station

The R180 is a highly accurate and fast Android robotic station. It features a rotation speed of 180°/sec and an EDM accuracy of 1 mm + 1 ppm, with a range of up to 1000 m without a prism. The R180 is available in two versions, 0.5" and 1" second.

STONEX EXTERNAL RADIO

SR35

RADIO MODEM HIGH POWER UP TO 35W

SR35 is a high power radio modem for transmitting RTK corrections from a basic GNSS receiver. The transmission power can be selectable by the user from 5W up to 35W reaching distances up to 50km. The radio has numerous settings that can define communication protocols, channel width and transmission frequency, thus full compatibility with other external radio modems or integrated in a GNSS receiver.



SR02

RADIO MODEM 2W POWER

SR02 is a high power radio modem for transmitting RTK corrections from a GNSS receiver. The transmission power can be selectable by the user from 0.5W to 2W reaching distances up to 10km. The radio has numerous settings that can define communication protocols, channel width and transmission frequency, thus full compatibility with other external radio modems or integrated in a GNSS receiver.



CONTROLLER

STONEX CONTROLLER

SH5A CONTROLLER

This Android device can bring unprecedented experience to all professionals looking for a powerful and adaptable instrument. SH5A is equipped with a comfortable ABC keyboard for fast and accurate use.



UT12P RUGGED TABLET

UT12P is a compact 6" Android tablet, its efficiency and performances make it suitable for working in difficult conditions.



UT32 RUGGED TABLET

UT32 is a smart Android 10 tablet, it is thin but resistant, the best choice when visibility is the main key, but the size needs to be limited. It is built to be durable, reliable and to excel in numerous fields of application.



UT56 RUGGED TABLET

UT56 is a new Android device, it is the perfect balance between modern OS, visibility and durability. It is built for those who need a light and manageable device but also need a large display.



S80 RUGGED TABLET

The S80 is a robust Android tablet, known for its accuracy, durability, and versatility. Ideal for professionals seeking a lightweight device, it boasts Android 13 for the latest features and security. With an 800-nit bright display, it excels in visibility, even outdoors.





MARINE & HYDROGRAPHY SOLUTIONS

BEST DEALS

HYDROBOAT 990

An Android-powered USV System for Bathymetric Surveys.

USVs (Unmanned Surface Vehicles) are widely used in hydrographic surveys, environmental monitoring, and water search and rescue. The hydrographic survey USV combines various complex systems to offer users the simple and efficient operation mode. With double hull design, HydroBoat 990 USV integrates the GNSS system, bathymetry system, communication system and autonomous navigation system, which ensures both efficient surveying and safe navigation.

TOP 3 CHALLENGES ABOUT USV



Usability

- Operate in One Versatile app
- Time-saving Turn on and Survey
- Network without Base Station
- Integration with GNSS and SBES
- Connection with Indicator Lights



Functionality

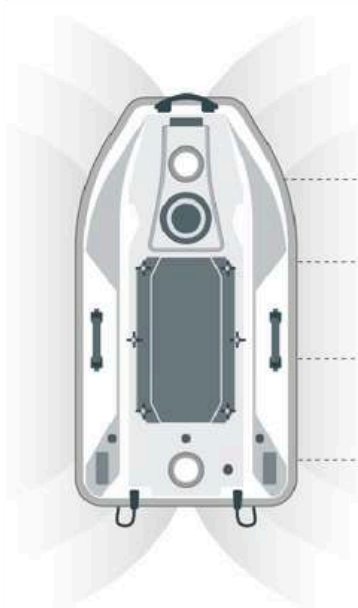
- Stable Hovering Function
- Avoid Collision with Obstacles
- Real-time Video Patrol
- 4G Remote Control
- Auto-reverse in the Shallows



Reliability

- IP67 Double Hull
- Anti-Collision & Wear-Resisting
- IHO Standard & CE Certification
- Automotive Grade INS Integration
- Onboard Water Depth Logging

SYSTEM OF EFFICIENCY AND RELIABILITY



- 1 Supported by auto and manual mode in the pilot system, safeguarded by radar's obstacle avoidance and hovering system.
- 2 Stable hull design for standing waves, IP67 waterproof, and rugged body with collision protection.
- 3 One-click connection with a powerful controller makes the USV a direct- 3 to-go system, operating at ranges of 2km.
- 4 The pioneering Android app for hydrography and pilot control, makes surveying easier and faster with one intelligent controller.

HYDROBOAT 1200

MULTI-PURPOSE USV PLATFORM FOR HYDROGRAPHIC SURVEYS AND MONITORING



HydroBoat 1200—an embodiment of compactness and ease, tailored for seamless operation across a spectrum of equipment.

Enhanced by professional CFD technology, its stability finds new heights. Melded with high-precision single-beam echo sounder, GNSS directional positioning receiver, and an advanced intelligent boat-control system, it deftly serves varied water operational demands.

Augmented safety through embedded IMU, 360° pan-tilt camera, and millimeter-wave radar fortifies its attributes comprehensively. This autonomous vessel, which can be mounted with leading ADCP, side-scan sonar, dual-frequency sounder, multi-parameter water quality meter, image sonar, and more, stands poised as the quintessential partner for tasks encompassing current measurement, bathymetry, underwater survey, and water quality assessment.



Portability

- 10 kg lightweight hull
- 1229 mm small size hull
- Multi-function Android boat control software



Versatility

- 240 mm large moon pool
- Supporting transparent data transmission
- Reaching maximum boat speed of 6 m/s for efficient movement



Safety

- 360° PTZ camera
- Millimetre wave obstacle avoidance radar
- Smart battery management platform

FEATURES

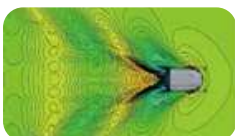


Adaptive Water Flow

Precise hovering and efficient trajectory tracking. No fear of waves and wind. Follow predefined path with accuracy even in challenging environment.

New GNSS+IMU Combination Algorithm

Measure changes in velocity and orientation, and able to solve the accurate position information in GNSS-blocked areas to complete the planned work.



Stability by Design

Hydrodynamically efficient design for the USV's intended operations, guided by CFD simulation, enhances hull stability and noise reduction under varied water conditions and loads.



SATLAB ES-224

DUAL-FREQUENCY ECHO SOUNDER

ES-224 dual-frequency echo sounder is widely used in sediment measurement for dredging and other water depth measurement projects in shallow water, deep water, and high sandy water. The full-featured SLHydro Sounder hydrographic software integrates bathymetry, navigation, and post-processing. Equipped with a 17" large screen and industrial computer platform, ES-224 offers a set of reliable solutions for hydrographic offices around the world with a robust dual-frequency transducer and a user-friendly survey Rod.



The Combination of High and Low Frequency

ES-224 features the simultaneous operation of both high and low frequencies at the same time, making it superior in both shallow and deep water.



The Full-Featured SLHydro Sounder Software

Status and operation can be easily done with the control panel on the front side while there are plenty of physical ports to output the required data at the rear side for different purposes.



Rugged Industrial Platform

ES-224 is designed with an enhanced computer platform, and has excellent performance in terms of stability and anti-interference, and compliant with EN 60945. 3 RS-232, 4 USB ports and 1 VGA to meet data transfer needs.



Superimposed echogram and digital bathymetry

Correct the faulty digitized results based on the superimposed echogram to ensure the reliability of depth result especially in complex scenario.

APPLICATIONS

- Tracking of the Seabed
- Sediment Measurement for Dredging
- Turbid Water with High Sand Content
- Measurement at High Speed



HYDROBEAM M4

PORTABLE MULTI-BEAM ECHO SOUNDER

The **HydroBeam M4** is an ingenious and compact portable multi-beam bathymetric system, brought to life by SatLab. It boasts exceptional precision without the need for frequent calibration, making it an ideal choice for lightweight operations. Its compact design, coupled with its intelligent features and circular transducer, renders it effortlessly deployable on a range of platforms, including USVs, AUVs, and ROVs. This versatility empowers users to swiftly conduct precise measurements at any location and time, liberating them from the constraints of traditional multi-beam systems. Moreover, it ensures the dependable and stable operation of unmanned missions across diverse environments, from serene lakes and meandering rivers to bustling harbors, ports, terminals, and intricate waterways.



ADVANCED FEATURES



Diverse Compatibility

The $\Phi 228\text{mm}$'s compact, **5.9kg lightweight** design ensures compatibility with unmanned platforms, facilitating easy transport and deployment in various settings.



Reliable Performance

Supports up to 1024 high-density beams with resolutions up to 7.5 mm, maintaining high performance and accuracy across different tasks and conditions.



Real-time Roll Stabilisation

Real-time Roll stabilisation maximises the multi-beam sweep and improves work efficiency.



Seamless Integration

Built-in INS and SVS in the transducer, eliminating complex attitude calibration, simplifying setup and reducing downtime.



High Efficiency

Adjustable scan width from 8° to 150° for up to 7.5x depth coverage, reducing survey repeats and increasing overall efficiency.



Intelligent Operation

Smart Efficient survey software enables operators to monitor progress, minimize manual tasks, and seamlessly integrate with Kongsberg, R2sonic, Reson, and other devices.



Strict Compliance with Standards

Exceeds IHO special order, CHS exclusive order & USACE New Work



SATLAB HYDROFLOW

ACOUSTIC DOPPLER CURRENT PROFILER

The **HydroFlow** series direct-reading Acoustic Doppler Current Profiler(ADCP) is an accurate and easy to use current profiling system, which can be deployed on flexible platform: trimaran, UVS, buoys and seafloor mounting and so on. Providing accurate measurement with 75m/25m range, the HydroFlow 600/ 1200 can be widely used for monitoring and surveying discharge of rivers, canal, offshore and other engineering projects.



Multiple Built-in Sensors

Integrating the gyro, temperature, pressure and tilting sensor, HydroFlow 600/1200 offers multiple source of information for the operation reference.



Long Profiling Range Multiple Cells

600Hz working frequency extends the current measurement range up to 75 meters (Hydro-Flow1200 up to 25m) with a maximum of 256 cells.



High Precision Current Measurement

Supported by broadband signal processing technology, the anti-noise level has been improved while the current measurement accuracy can be up to $0.25 \pm 0.25\text{cm/s}$.



Easy to Use Software

Clear software working flow and UI lower the learning curve, making it easy to use.

APPLICATIONS

- River Hydrology
- Irrigation Monitoring
- Environmental Impact Studies
- Fisheries Studies
- Flood Warning
- Circulation Studies





Multiple Frequency Available

There are multiple frequencies available to use according to required applications. 100/900kHz, 400/900kHz and 400kHz, users can always find a suitable mode.



Real-time CW & CHIRP

Real-time switching provides an adaptive solution for users, while the anti-noise performance is improved, the resolution higher and the range longer.



Multiple Internal Sensors

By integrating the sensor for heading, pitch, roll, depth and pressure, images are corrected in real time and related reference information can be acquired to ensure operational safety.



Ultra Small Beam Angle

Ultra Small Beam Angle. Beam angle can be up to 0.2°, providing resolution up to 1.25cm, so it is easy to recognize smaller objects.

APPLICATIONS

- Hydrographic Surveys
- Channel/Clearance Surveys
- Search&Rescue&Found
- Water Construction Inspections
- Geological surveying and mapping
- Environmental Habitat Surveys
- Cable Route & Pipeline surveys


SATLAB HYDROSCAN SIDE SCAN SONAR




GEOSOUNDER CT SYSTEM

The **GeoSounder** is a compact, rugged and survey grade single beam echo sounder, with internal GNSS. Transducer data and GNSS data are combined and transmitted over both RS232 and TCP ethernet connections.


FEATURES:




Rugged & Waterproof




Internal (RTK) (D)GNSS



Available as turn-key solution with Viking & Viking Process software



Internal UHF Transceiver



Single & Dual Frequency

USER SPECIFICATIONS:

- Rugged Waterproof Peli Case Housing
- IP65 I/O Connections
- NMEA Output
- Wide input power supply
- 200KHz 8° Smart Transducer
- 30 & 200 KHz Smart Transducer option
- Internal Satel UHF receiver option
- Dimensions: 28x24x13 cm
- Weight: 2.1kg

I/O SPECIFICATIONS:

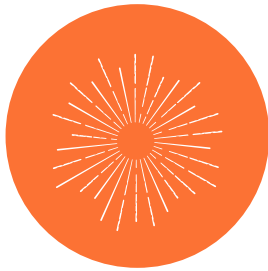
- 1P65 9 to 30 Volt DC Input
- 1P65 RS232 I/O
- P65 RJ45 Ethernet
- TNC GNSS connector



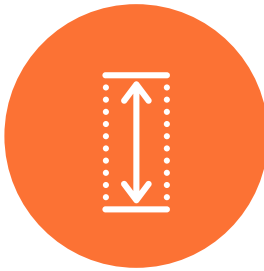
NORTEK SIGNATURE 1000

HIGH-PERFORMANCE MEAN CURRENTS AND TURBULENCE, WAVE HEIGHT AND DIRECTION

The **Signature1000** ADCP is the optimal tool for turbulence measurements. With a maximum sampling frequency of 16 Hz, it gives the scientific community an unprecedented opportunity to study a part of the turbulence spectrum that has never been accessible before. Vertical resolution current profiles of 2 cm over a range of up to 8 m further increase the Signature1000's versatility, as does its ability to measure wave height and direction. The center beam also functions as a biological echosounder, enabling high-resolution measurements of biomass in the water column.



Five beams for mean currents and turbulence



Wave height and direction



Ice thickness and ice drift



Very small size and weight

APPLICATIONS

- Simultaneous current and turbulence studies up to 30m range
- Sediment transport studies or biomass estimates using optional scientific echosounder
- Buoy-mounted measurements in high energy areas with optional AHRS for motion correction
- Wave measurements and ice monitoring using acoustic surface tracking (AST)



TELEDYNE SENTINEL V

The Sentinel V ADCP blends capability, flexibility, and reliability seamlessly. With embedded wifi for easy setup, it efficiently gathers high-quality data for diverse research goals. Its raw data capability supports flexible processing, and the durable hardware design minimizes maintenance. The Waves Array enhances its capabilities, making it a top choice for waves and current profiles.



TELEDYNE RDI RIVER PRO ADCP

The RiverPro 1200, a top-tier broadband ADCP, provides unmatched accuracy in bottom tracking and water profiling on a second-by-second basis. Tailored for dynamic river measurements, it reduces variability between transects, saving time in the field and office. The RiverPro 600, built for challenging water conditions, leverages the industry-standard 600 kHz frequency for excellence in diverse sediment, river depth, and bottom tracking conditions.



TELEDYNE RDI RIVER RAY ADCP

Gather accurate stream and river discharge data effortlessly with the RIVERRAY ADCP. This comprehensive solution includes the RiverRay ADCP, a custom boat, user-friendly software, and wireless communication, ensuring precise measurements. Benefit from Teledyne RDI's four decades of acoustic Doppler technology expertise, making RiverRay a reliable and budget-friendly solution for measuring river discharge in various conditions.





VALEPORT MODEL 106 LIGHTWEIGHT CURRENT METER

The Model 106 is the ideal instrument for coastal and estuarine applications and other light-duty survey work. A low cost, lightweight alternative to larger flow meters, it is purpose-built for applications where the superior durability and depth rating of Valeport's larger meters is not necessary. The instrument is manufactured from titanium and polymers, giving excellent resistance to corrosion, whilst maintaining a small size and low weight. Utilising the standard Valeport 125mm diameter impeller, the Model 106 features speed and direction parameters as standard, with further options of temperature and depth. Data (logged or real time) is compatible with Valeport's DataLog™ software.

VALEPORT VRS 20 RADAR LEVEL SENSOR

The Tidemaster is the cost-effective way to accurately record water height, with the added option of gathering meteorological data using its ultrasonic wind speed and direction sensor. This small Water Level Recorder, suitable for use in fresh or salt water, can be deployed for up to one year, dependent on the sampling rate. Instrument set-up and data retrieval is via a display panel or the PC software supplied. Alternatively, the system can be supplied with radio modules for real-time data transmission



VALEPORT TIDEMASTER PORTABLE TIDE GAUGE

The Tidemaster is the cost-effective way to accurately record water height, with the added option of gathering meteorological data using its ultrasonic wind speed and direction sensor.

This small Water Level Recorder, suitable for use in fresh or salt water, can be deployed for up to one year, dependent on the sampling rate. Instrument set-up and data retrieval is via a display panel or the PC software supplied. Alternatively, the system can be supplied with radio modules for real-time data transmission.

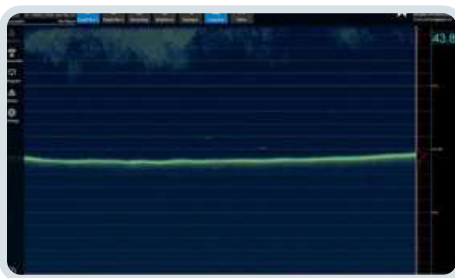


TELEDYNE ODOM ECHOTRAC E20

Hydrographic Echosounder for demanding 24/7 use.

The new ECHOTRAC E20 is the result of more than 40 years of experience in precise echosounding and market leading sonar technology. A portable, compact and robust echosounder designed for survey in all environments allowing you to maximize your utilization of the equipment and reducing your costs by having one unit for all applications.

PRODUCT FEATURES



The new SBES UI operator software is being used to operate the ECHOTRAC E20 in shallow water at 200kHz

PRECISE AND RELIABLE SURVEY DATA

for shorter data processing time, enabling you to complete your project faster.

DUAL CHANNEL SURVEY

Echosounder from very shallow to deep sea, from 10 kHz to 250 kHz – giving you the flexibility for all your survey projects, maximizing utilization of your investment.

THE COMPACT SYSTEM WITH MINIMAL INTERFACING EFFORT,

allows for fast mobilization, and extremely low space to go anywhere, enabling you to start work immediately.

INTUITIVE USER INTERFACE

is compatible with a broad range of transducers with straightforward transducer interfacing

THE ECHOTRAC E20

Easy to use, so you can focus on the job at hand.

E20 PRODUCT FEATURES

- 1 or 2 frequency agile channels from 10 to 250kHz
- 0.5 to 6,000m depth range
- Ruggedized and shock-proof, water resistant IP67

TELEDYNE ODOM TRANSDUCER

Teledyne Odom have a wide range of echo sounder transducers to meet almost every need.



SS510



M194



M192



M74



M177



SANDALERT PORTABLE SAND MONITOR

SandAlert Portable is a complete kit, including sensor, mounting strap, and 50 m (164 ft) extension lead, fitted in a rugged pelican case. A graphics display gives real-time sand data and trend information up to 90 days at 1-minute intervals. A PC Interface allows data download and graphical analysis. SandAlert Portable is perfect for short-term well evaluation and to determine methods of control.

PORTABLE DOPPLER PDFM 5.1 FLOW METER

Portable Doppler Flow Meter for "complex" fluids. Features non-invasive flow measurement, affordable flow verification with a single versatile transducer, and can function as a logger for weeks or a continuous meter when the inline flow meter is unavailable.



DFS 5.1 DOPPLER FLOW SWITCH

The DFS 5.1 Doppler Flow Switch offers basic control for challenging liquids without disrupting flow. Installed in minutes on pipes 12.5 mm (0.5 in) or larger, it requires no maintenance. The relays set ON/OFF at flow rates from 0.075 m/s to 3 m/s (0.25 ft/s to 9.8 ft/s), with options for separate ON/OFF points or a high/low flow alarm.

SLUDGE BLANKET LEVEL CONTROL

The Sludge Finder 2 provides reliable and continuous sludge blanket level measurement. The two-part system has been purposely designed for sludge blanket level measurement, operating ultrasonically through a liquid. The Sludge Finder 2 uses proven echo processing algorithms to identify the sludge interface level using state-of-the-art technology only found in this unit.





REFLECT

2-WIRE RADAR LEVEL SENSORS

with 4-20mA output, FMCW radar tech, 8-20m range, $\pm 2\text{mm}$ accuracy, and 6° beam angle. Easy installation via REFLECTTILT™ LEDs and BReez™ adapter. Features embedded DATEM software, Bluetooth configuration, user-defined range, and ATEX approval. Compatible with FDT framework apps via Device Type Manager (DTM) and HART communication.

MANTARAY

PORTABLE AREA VELOCITY FLOW METER

Portable area velocity meter that measures flow using a submersible ultrasonic sensor. The unit is designed for flow surveys in open channels, partially-full sewer pipes, and surcharged pipes – making the portable open channel flow meter suitable for sewer monitoring, industrial flow monitoring, irrigation flow, and natural streams.



FAR SIGHT

NON-CONTACTING VELOCITY MEASUREMENT

FarSight™ provides the highest confidence in challenging velocity measurement applications while maintaining maximum performance. FarSight™ is the newest non-contacting velocity sensor in the Pulsar Measurement portfolio, with excellent low-velocity measurement capabilities, built-in tilt compensation, rainfall interference discrimination, and low-power consumption with Modbus output.

ULTRA 4

Advanced Ultrasonic Level, Flow, Volume, & Pump Control with a user-friendly multifunction display, on-screen monitoring, built-in volume calculations, and Micro SD card data logging. Compatible with dB & dBR transducers, offering a range up to 40 m (131.2 ft).



dB TRANSDUCER SERIES

Non-contact Ultrasonic Sensors with DATEM echo processing technology for precise measurements, strong signal-to-noise ratio, integral temperature compensation, and narrow beam angle. Capable of cable extensions up to 1,000 m and a range of up to 40 m. ATEX & cFMus approved for safety and reliability.

VECTOR VS1000

GNSS RECEIVER



The Hemisphere Vector™ VS1000 delivers precise heading, Athena™ RTK positioning, and full Atlas® capability for the marine market. With support for up to 10 meters of antenna separation, it achieves outstanding 0.01-degree RMS heading accuracy alongside RTK positioning and complete compatibility with Hemisphere GNSS' Atlas® corrections.

HEMISPHERE R632

GNSS RECEIVER

The new R632 GNSS receiver is a full- solution product in an incredibly compact and powerful package, offering the ability to easily upgrade to an astounding 0.01° accurate heading. Built on the foundation of Hemisphere's new Lyra, Cygnus and Aquila core technologies, the R632 offers amazing new interference rejection and multipath mitigation. The result is an exceptional combination of performance, communications, and connectivity.



FEATURES

Multi-frequency GPS, GLONASS, BeiDou, Galileo, QZSS, IRNSS and Atlas L-band

UHF, cellular, Bluetooth and Wi-Fi wireless communication

Long-range RTK baselines up to 50 km with fast acquisition times

Status LEDs and powerful Web UI

Best-in-class RTK performance with Athena GNSS engine

Ethernet (including PoE), CAN, Serial, and USB for excellent communications flexibility

NORBIT - iWBMS

TURNKEY MULTIBEAM SONAR SYSTEM

FOR HIGH RESOLUTION BATHYMETRY

This all-in-one broadband multibeam solution delivers high-resolution bathymetry with a top-tier sonar, Applanix WaveMaster II, ensuring swift mobilization and quality sounding in all conditions. The WBMS-series utilizes advanced signal processing and NORBIT's innovative technology for a compact wideband curved-array multibeam sonar. Efficient survey data acquisition is supported by DCT (NORBIT Integrated Data Acquisition Software).

FEATURES

Multibeam Sonar with Integrated Inertial Navigation System & Integrated NTRIP Client	80kHz Bandwidth	Roll-stabilisation	Backscatter outputs (Intensity, Sidescan, Sidescan Snippets, Water Column)
Multidetect	Simple Ethernet Interface	Integrated Sound Velocity Probe	Hydrodynamic Fairing
Mounting Bracket Included	FM & CW Processing	Flexible Power	Exceeds IHO Special Order, CHS Exclusive Order & USACE New Work



APPLICATIONS

- Shallow Water Bathymetry
- Pipeline Surveys
- Pond, River and Estuary Surveys
- Harbor and Lake Surveys
- Unmanned Surface Applications (AUV or ASV)
- Coastal Surveys

SOFTWARE & LICENSE SOLUTIONS

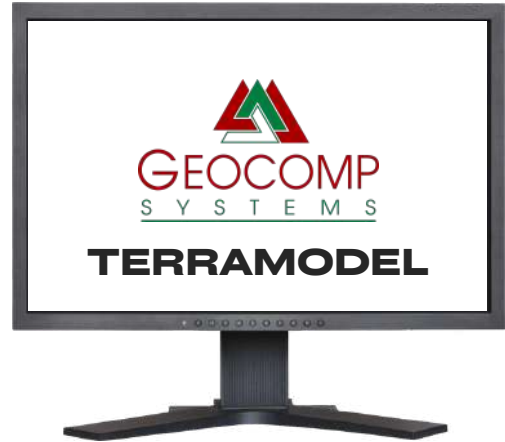
TERRAMODEL

Software for Civil design and Survey.

Trimble Terramodel is an integrated graphical application for civil engineers, surveyors and anyone else who wants to work with terrain models or alignment design on Windows.

Terramodel free Field Data Module provides the basic tools to download, upload, import, export, view, measure and edit data from survey and CAD.

Buy modules for CAD, Cogo, Contour, Site design, Roadway, Sheet assembly, Hydrology, Sewer, Images, Visualizer or Hydrographic mapping. Bundle modules into a Pak for better value.



Notable strengths of Terramodel 10.61 include :

 <p>Point-based 3D CAD</p>	 <p>Fast and accurate terrain modelling and volumes</p>	 <p>Powerful road design</p>	 <p>Data transfer to and from a wide range of survey and civil engineering systems</p>	 <p>A huge range of extra commands by Geocomp Systems</p>
--	---	--	--	---

TERRAMODEL PAKS

a. Field Data

- For importing, exporting, displaying and measuring surveys and terrain models
- Field Data module
- Free!

b. GeocompStarterPak

- For surveying and drafting
- Field Data and CAD modules
- Customer Care Membership
- Geocomp Update

c. SurveyPak

- For surveying, drafting and contouring
- Field Data, CAD, Coordinate Geometry (Cogo) and Contour modules
- Customer Care Membership
- Geocomp Update

DesignPak

- For surveying, drafting, contouring and site design
- Field Data, CAD, Cogo, Contour and Site Design modules
- Customer Care Membership
- Geocomp Update

RoadEngPak

- For surveying, drafting, contouring, site design and road design
- Field Data, CAD, Cogo, Contour, Site Design and Roadway modules
- Customer Care Membership
- Geocomp Update

ConstructionPak

- For surveying, drafting, contouring, site design, road design and sheet assembly
- Field Data, CAD, Cogo, Contour, Site Design, Roadway and Automated Sheet Assembly and Processing (ASAP) modules
- Customer Care Membership
- Geocomp Update

TerraPak

- For surveying, drafting, contouring, site design, road design, sheet assembly, hydrology, drainage and aerial photography
- Field Data, CAD, Cogo, Contour, Site Design, Roadway, ASAP, Image manager, Hydrology and Sewer modules
- Customer Care Membership
- Geocomp Update

TERRASOLID

Software for processing point clouds and images.

Terrasolid is a software for processing images and point clouds. It is used by professionals in engineering, geospatial, operations, and environmental fields. Terrasolid is used to analyze data, create models and vectors, and produce deliverables.

Terrasolid can process point cloud data from LiDAR and aerial photos. It provides tools for surveyors, civil engineers, designers, and planners.



POINT CLOUD INTELLIGENT

VERSATILE AND CAPABLE TOOLS

OVER 30 YEARS OF INDUSTRY EXPERIENCE

TERRASOLID PRODUCTS



TERRASCAN

TerraScan, efficiently handles large laser point clouds with tools for import, project structuring, and automatic classification. It automates 3D vector data creation for tasks like building modeling, power line vectorization, and corridor analysis. Supporting batch processing and various formats including LAS, LAZ, and custom ASCII, TerraScan streamlines point cloud management and 3D modeling tasks.



TERRAMODELER

TerraModeler creates, edits, and utilizes surface models (TINs) from various sources like LiDAR points and XYZ ascii files. It offers versatile visualization options, contour line production, lattice models, TIN modification, profile creation, volume calculation, and labeling. With export options, TerraModeler is a versatile tool for design and modeling tasks.



TERRAMATCH

TerraMatch enhances raw laser point cloud accuracy by comparing data from overlapping paths. It calculates correction values for misalignment angles and xyz location errors using surface matching or tie lines on various surfaces, improving overall data quality.



TERRAPHOTO

TerraPhoto processes survey images and laser data, creating accurate ortho photos with refined positioning and color coordination. Utilize tie points and ground control points for precision, and enjoy additional features like color adjustment and vector models for high-quality results

FLIGHT PLANNING CONTROL

UgCS has been designed from the ground-up to be a true multi-platform flight planning software for drones. We support drones from different manufacturers including DJI, FreeFly, Inspired Flight and others, including many drones from the Blue UAS list.



Collect correct data the first time and eliminate the need to recollect data.

Perform missions confidently while minimizing risks and delivering high-quality data required by commercial customers.

Expand your service offerings and tap into more sophisticated and profitable market segments. (e.g. powerline inspections, LiDAR surveys)

Features

Smart AGL Terrain following

Utilise UgCS' industry-leading Smart AGL terrain following mode to execute accurate flights over complex terrain.

Vertical inspections

Inspect buildings, towers or rock cliffs using vertical scan tool in-built in UgCS.

LiDAR flight planning

Use the advantages of in-built LiDAR toolset to calibrate IMU and gather precise and accurate LiDAR point clouds.


Elevation and map import

Plan flights using custom maps and digital elevation models (DEM) which can be easily imported into UgCS.

Fly offline


UgCS installs locally on your computer. Simply cache maps and elevation for offline use and fly anywhere.

Application

 **LiDAR Surveys**


 **Vertical Inspections**


 **Mining**

 **Photogrammetry**

 **Magnetics Surveys**

 **Powerline Inspections**

 **Live Video Streaming Surveys**

 **Test Counter-Drone Systems**



METASHAPE AGISOFT

Intelligent photogrammetry enhanced with LiDAR data processing

Agisoft Metashape is a cutting-edge software solution, with its engine core driving photogrammetry to its ultimate limits, while the whole system is designed to deliver industry specific results relying on machine learning techniques for post-processing and analysis tasks.

The software allows to process images from RGB or multispectral cameras, including multi-camera systems, into the high-value spatial information in the form of photogrammetric point clouds, textured polygonal models, georeferenced true orthomosaics and DSMs/DTMs. Images can be co-processed with LiDAR points to exploit advantages of both data sources. Further post-processing enables to eliminate shadows and texture artifacts from the models, calculate vegetation indices and extract information for farming equipment action maps, automatically classify dense point clouds, etc.



VERY FAST & HIGHLY ACCURATE

Based on the state-of-the-art technology developed by Agisoft, Metashape allows for very fast processing, providing at the same time consistent and highly accurate results both for aerial and close-range photography (up to 3cm for aerial, and up to 1mm for close-range photography), as well as for LiDAR data based surface reconstruction.



LOCAL OR CLOUD PROCESSING

Agisoft Metashape is capable of processing of 50 000+ photos across a local cluster, thanks to distributed processing functionality. Alternatively, the project can be easily sent to the cloud to minimize hardware investment, with all the processing options being still available.



INTUITIVE UI & STEREO MODE

The software package has a linear project-based workflow that is intuitive and can be easily mastered even by a non-specialist, while professional photogrammetrists can benefit from advanced features like stereo mode and have complete control over the results accuracy, with detailed report being generated at the end of processing.

ADVANTAGES



Highly accurate and detailed results



Combined processing of imagery, terrestrial laser scans and aerial LiDAR data



Agisoft Cloud for processing, visualization and sharing of the results



Easy sharing with PDF or fly through video export and direct upload to online resources



Fully automated and intuitive workflow



GPU acceleration for faster processing



Stereoscopic measurements for precise feature extraction



Reasonably powerful Standard edition for art projects



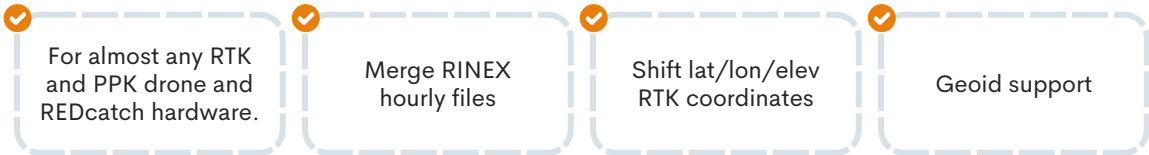
Network processing for large projects



REDtoolbox

GNSS PPK Postprocessing and Geotagging

For almost any RTK and PPK drone and REDcatch hardware.



What is REDtoolbox software good for?

The software performs a multi-constellation GPS, GLONASS, Beidou, Galileo and multiband L1, L2, L5 GNSS postprocessing PPK of a Base – Rover set up. Such configurations can be found in many UAV / drone applications and terrestrial 3D ImageVector device. The output is a corrected GNSS path at centimetre level accuracy (depending on the device used, the current satellite constellation and receipt quality). The corrected path is then **precisely assigned to the images taken by the drone and can be used directly in photogrammetry and documentation application.**

Compatible drones and devices of REDtoolbox software

- DJI P4RTK Phantom4 RTK
- DJI M300 P1 camera, L1 (RGB camera)
- DJI MAVIC 3 Enterprise RTK
- Autel EVO2 RTK
- Yuneek H520, H850 RTK
- Emlid Reach kits
- Sepentrio mosaik drone kits
- ublox ZED F9P, M8P chips
- ublox kits like: TopoDrone, Teokit, metta, etc
- 3D ImageVector - camera GNSS & IMU
- 360RTK add-on for Insta360 one x2/x3



STONEX SOFTWARE

RECONSTRUCTOR

Powerful and usable 3D Software

The Stonex Reconstructor software allows you to manage and align point clouds acquired through laser scanners or other sensors, such as the Stonex F6 Handheld scanner, clouds produced by photogrammetry and in general any point cloud. Complete and clear workflows will guide you during the processing and the expandable modules are able to meet different needs, covering many fields, such as surveying, mining, construction, architecture, cultural heritage, BIM, galleries etc.



CUBE-SCAN

Easy to use and versatile

Cube-scan is part of Stonex Cube-suite. Easy to use and learn, it allows basic 3D workflows.

Import point clouds from Stonex scanner or different sensors and clean them through selection tools. Aligns the point clouds by choosing from a variety of registration modes.

Export registered point clouds to work with your own software or process measures, contour lines, edges and orthophotos.

CUBE-FLY

Drone Mission Planner and Photogrammetry Software

Stonex Cube-fly has been developed to work on desktop computer or tablet running Microsoft Windows. It allows to perform advanced UAV drones' mission planning and to process photogrammetric calculations of digital images.

Choosing one of the cameras pre-sets and selecting the area for the mission, the software automatically calculates the path and info about the flight, such as speed, total time and number of shots. Adjusting altitude, it is possible to have the GSD needed. The pictures can be processed in order to obtain 3D point clouds, meshes and orthophoto.



GNSS CORRECTION SERVICE

Atlas is a GNSS correction service from Hemisphere that provides base station-free corrections via L-Band satellites. Atlas broadcasts from 200 reference stations worldwide and can provide up to 10cm accuracy on a single unit.



Atlas is available in three scalable service levels, providing performance that meets or exceeds that delivered by other industry leaders.



Market leading prices makes it easy for you to choose and purchase your choice of Atlas service level right here.



One size does not fit all. Atlas, AtlasLink and Atlas Web Portal are all available through the HGNS brand or can be branded through partner OEMs.

Atlas delivers high-accuracy positioning data worldwide that enables its users to work smarter – wherever they are and whatever they are doing, without the need for expensive reference stations. With Atlas you can choose the accuracy level that meets the needs of your industry and application – from agriculture to marine to survey.

FUGRO MARINESTAR

Fugro Marinestar® delivers a range of GNSS positioning services worldwide tailored for the dredging and marine construction, navy and hydrographic, wind farm and oceanographic research sectors.



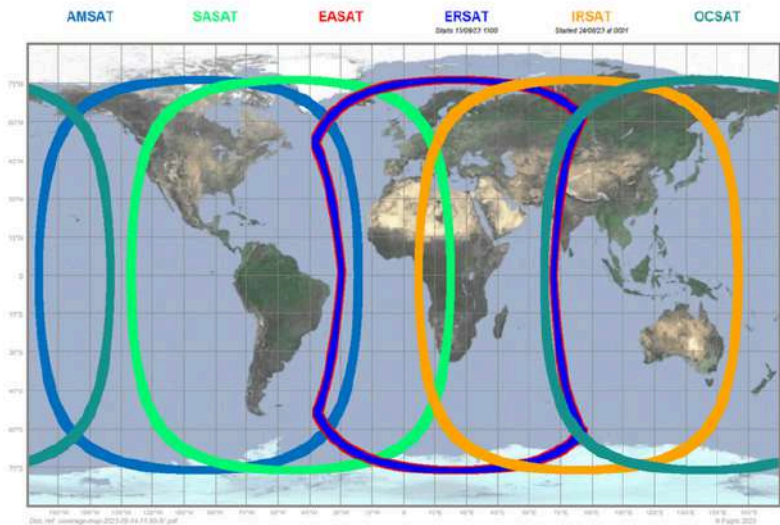
Fugro Marinestar® offers a range of services tailored to the particular application and market environment to ensure a cost effective, fit for purpose robust solution under every circumstance. We offer:

- Supply of corrections with global coverage
- Using 4 GNSS constellations (GPS, GLONASS, Galileo, Beidou)
- Via L-Band satellites and NTRIP
- to a variety of GNSS receivers of different manufacturers

FEATURES

Global Coverage

With over 30 years of satellite-based positioning systems and technology experience and continuous research and development, we provide high quality market-leading innovative positioning services. Marinestar® offers global coverage, with dual coverage in most places to provide a back-up solution, as shown in the map :



ULTRA CORRECTION SERVICES



The **VERIPOS Ultra and Ultra2 correction services** are global, high accuracy augmentation services that deliver decimetre-level positioning accuracy. These services are robust and reliable in all locations, including areas experiencing ionospheric disturbances.

Ultra services are based on Precise Point Positioning (PPP), a technique where all GPS system errors are removed or minimised by direct calculation, precise modelling or estimation. PPP isn't dependent on the location of reference stations, so it's able to provide position accuracy, regardless of location. To carry out PPP, real-time corrections are derived from the JPL Orbit and Clock Determination System (OCDS) which uses data from JPL reference stations.

Ultra can be purchased as a stand-alone service, but most often is purchased as a complementary service to Apex to ensure operation redundancy.



APEX SATELLITE CORRECTION SERVICES

The **VERIPOS Apex correction services** deliver global, high-accuracy GNSS positioning designed to meet the requirements of all offshore positioning and navigation applications.

Apex uses Precise Point Positioning (PPP), an absolute positioning technique which corrects or models all GNSS error sources such as: satellite orbit and clocks, tropospheric, ionospheric and multipath errors. PPP isn't dependent on the location of reference stations, so it's able to provide position accuracy regardless of location.

VERIPOS operates its own Orbit and Clock Determination System (OCDS) which derives real-time corrections for all available satellite constellations using proprietary algorithms. The OCDS uses data from the VERIPOS reference station network. These stations are independent from the reference stations used by JPL for the Ultra services.

Apex services include three service levels: Apex, Apex2 and Apex5. Each service offers the same accuracy level, but the robustness of each differs. Service levels that utilise more than one GNSS constellation will have more observable satellites which helps maintain accurate positioning when masking occurs or when suffering from ionospheric scintillation.

TERRASTAR CORRECTION SERVICES

TerraStar Correction Services unlock high-performance real-time positioning for applications around the world. Powered by an expansive global system, TerraStar corrections provide seamless worldwide coverage giving you the highest quality data for assured, reliable positioning anywhere, anytime. TerraStar completes the high-precision solution for OEM7 applications from Hexagon | NovAtel with a range of options to fit your needs, making TerraStar as precise and flexible as you need it to be.



HIGH-PERFORMANCE GLOBAL CORRECTIONS

TerraStar's worldwide reference station network delivers a constant stream of clean measurements into our correction generation engine. This independently owned and operated network is the backbone for high-quality multi-constellation and multi-frequency clock and orbit corrections.



RELIABILITY TRUSTED BY LEADERS

Reliability is built into the whole system, from redundancy at each reference station to geographically separated, independent network control centres. This robust system, combined with our expert monitoring and support teams, ensures over 99.999% service availability and uptime.



TOTAL SOLUTION DESIGN

TerraStar users get the best performance and experience from NovAtel systems. Long-trusted for high-precision positioning technology, NovAtel's corrections, positioning algorithms and hardware are designed side-by-side to ensure a seamless solution with powerful performance. The result is 24/7/365, all-weather operation, even in challenging environments.



THE SECURITY OF SIMPLICITY

Corrections are broadcast over geostationary L-Band communication satellites for continuous, no-hassle data delivery and are conveniently available over the Internet for connected users. Subscriptions are easy to manage online, with flexible durations and scalable service levels to suit your application needs.



PROJECT PORTFOLIO

Our JOURNEY *Throughout Indonesia*

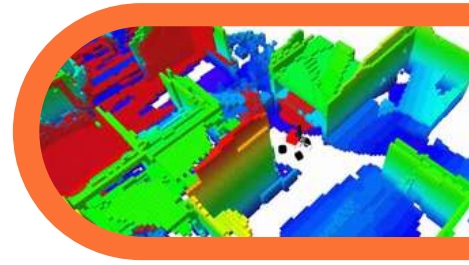



Oseanland Survei Indonesia offers professional support for all range products, and offers full support and training. Our facilities in Bintaro, South Tangerang are home to technical support teams who are always available to answer your call or attend your site when required. Our presence allows us to create close relationships with our customers and provide service, support, training, and information throughout the lifetime of your product.

Our team has **experienced in surveying and provider survey technology for 10 years** across Indonesia. Our experience allows us to understand the customer's needs and develop the most suitable solution for every occasion.

Our Journey one of them is in national strategic projects to do acquisition of topographic data in the New National Capital City (IKN) in East Kalimantan using UAV-LiDAR technology. Oseanland also plays a role in disaster mitigation with Badan Meteorologi, Klimatologi, & Geofisika (BMKG) to determine the source of the earthquake in West Pasaman. Oseanland also committed to ensuring equitable quality education by providing training at UGM, UPN VY, UMS, etc. We also brought our latest laser scan technology in 3D data acquisition at Bagong Dams and Leuwikeris Dams.

OSEANLAND'S INNOVATIVE SLAM PROJECT at Wisma Atlet



 OseanLand is pushing the boundaries of geospatial innovation with its latest venture: Project Scan SLAM at Wisma Atlet. This initiative employs Simultaneous Localization and Mapping (SLAM) technology to create real-time, detailed maps of the venue's interior, showcasing OseanLand's commitment to precision mapping and technological advancement.



OseanLand's Technological Prowess:

This initiative underscores OseanLand's commitment to driving geospatial technology forward. By integrating SLAM into the mapping process, the company not only provides practical solutions for venue management but also opens doors to new possibilities in augmented reality, emergency response, and smart facility planning.

OSEANLAND's LIDAR PROJECT

at IKN : Transforming Urban Mapping in Indonesia



OseanLand, a leader in geospatial solutions, is making waves with its latest LiDAR project at IKN (Ibu Kota Negara), the planned new capital city of Indonesia. This cutting-edge project utilizes Light Detection and Ranging (LiDAR) technology to redefine urban mapping, showcasing OseanLand's commitment to technological excellence and precision in spatial analysis.

Urban Planning Excellence:

OseanLand's LiDAR project provides detailed insights into IKN's topography, infrastructure, and landscape, advancing urban planning initiatives.

Optimized Infrastructure Design:

LiDAR technology supports the detailed mapping of existing and proposed infrastructure, facilitating efficient design processes for urban development.

Environmental Impact Assessment:

The project aids in comprehensive environmental impact assessments, ensuring sustainable development practices through precise elevation data analysis.

Disaster Risk Mitigation:

OseanLand's LiDAR data contributes to identifying vulnerable areas, enabling effective measures for disaster risk mitigation and enhancing overall resilience.

OseanLand's Technological Expertise:

OseanLand's foray into LiDAR technology at IKN showcases the company's prowess in leveraging advanced geospatial tools for comprehensive urban planning. The precision and accuracy of LiDAR data contribute significantly to informed decision-making and sustainable development practices.

OseanLand's LiDAR project at IKN marks a significant milestone in Indonesia's urban development landscape. By integrating cutting-edge technology into the planning process, OseanLand is not only shaping the future of IKN but also setting a standard for precision mapping and advanced geospatial solutions in urban development projects. This endeavor reflects OseanLand's dedication to excellence and innovation in the field of geospatial technology.



The Use of USV SATLAB HYDROBOAT 990 for Coastal Survey



From July 29 to August 30, 2023, PT. Oseanland Survei Indonesia had the opportunity to collaborate with the Geospatial Information Agency, known as PT. Geosindo. In this collaboration, PT. Oseanland Survei Indonesia was responsible for conducting a survey along the coastline stretching from South Sulawesi to North Sulawesi. The objective of this activity was to measure bathymetry along the coastline, generating XYZ bathymetric data in accordance with user requests. Bathymetric measurement involves the measurement and mapping of the topography of the sea floor. Information on sea depth, or bathymetry, in a water area is crucial when it comes to activities involving the utilization of space in coastal regions.

In this coastal survey, PT. Oseanland Survei Indonesia utilized a survey tool known as the USV SatLab HydroBoat 990. The use of the USV SatLab HydroBoat 990 streamlined coastal survey activities, requiring only one person, one boat, and one controller to complete bathymetric surveys. This efficiency allowed PT. Oseanland Survei Indonesia to finish the assigned task promptly and in accordance with user requirements.



What is the SatLab HydroBoat 990 USV?

The USV SatLab HydroBoat 990 is an Android-powered Unmanned Surface Vehicle (USV) system specifically designed for bathymetric surveys. This system is characterized by user-friendly operation, strength, and reliability. Equipped with easy-to-use Android software and a practical integrated vessel structure, the USV SatLab HydroBoat 990 sails quickly and accurately measures with excellent technical performance.

Functional

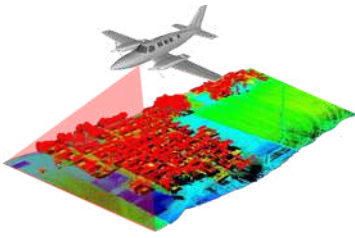
The USV SatLab HydroBoat 990 features a built-in GNSS receiver and INS sensor for precise position determination and real-time echo information to map the seafloor topography. Its hovering function keeps the hydroboat steady in flowing water, while the overall structure stabilizes it, reducing imbalance from sea waves.

Ease of Use.

The SLHydro USV software on the Android controller allows easy access to bathymetric measurements, route planning, online maps, and video exploration. The USV SatLab HydroBoat 990 features a GNSS receiver and SBES echo sounder. A simple "connect" click configures the GNSS, echo sounder, and video system automatically, eliminating the need for complex procedures.

Reliable

The HydroBoat 990, equipped with precise millimeter-wave radar, ensures safe navigation by accurately detecting obstacles. Its dual-hull, waterproof (IP67) design prevents erosion and sinking, making it a reliable tool for bathymetric surveys.



Unveiling the Power of **AIRBORNE** LiDAR Technology

In the dynamic landscape of geospatial innovation, OseanLand has harnessed the transformative power of Airborne LiDAR (Light Detection and Ranging) to redefine the way we perceive and interact with our surroundings. This cutting-edge technology, integrated seamlessly into OseanLand's activities, offers a wealth of possibilities in precision mapping, resource management, and environmental monitoring.

OseanLand's Airborne LiDAR Technology:

OseanLand employs state-of-the-art Airborne LiDAR systems that are strategically mounted on aircraft, ensuring optimal coverage and accuracy. These systems utilize laser scanners and advanced Global Positioning System (GPS) receivers to capture highly detailed three-dimensional data from the air. This powerful combination facilitates the creation of precise elevation models, 3D point clouds, and invaluable insights for a range of applications.



OseanLand's strategic integration of Airborne LiDAR technology showcases a commitment to excellence in precision mapping and environmental monitoring. As the company continues to explore new frontiers, the impact of Airborne LiDAR in OseanLand's activities is poised to play a pivotal role in shaping the future of maritime and coastal management, infrastructure inspection, and environmental conservation.

Realtime Monitoring SOLUTIONS

GROUNDWATER IN JAKARTA



Oseanland Survei Indonesia collaborate with The Ministry of Energy and Mineral Resources (EMR) through Groundwater Conservation Center, Geological Agency to monitor the condition of groundwater in Jakarta.

A huge amount of consuming groundwater in Jakarta leads to down level of underground water, landsubside, and saltwater intrusion, especially in north Jakarta.

The deepest surface of groundwater recorded in 2013 at Jakarta Groundwater Basin is about 40 meters above mean sea level (masl). Meanwhile in 2018, there is a positive change around -35 masl, the lowest level of Groundwater Basin in North Jakarta.

The highest decline speed of groundwater surface measured by GPS Geodetic is 12 cm/year in Ancol, North Jakarta. Another factors are a natural soil compaction, pressure of building, and geotectonic

Thus, Oseanland provides realtime monitoring solutions to monitor the quantity and quality of the groundwater through an AWLR (automatic water level record) system that uses telemetry technology

Permanent GNSS base station is also installed in the monitoring area as a control point to monitor land level changes in precision.



LOCATION AREA

Monitoring area of groundwater and changes of land level located in Jakarta

UAV-LiDAR ROLE in DISASTER MITIGATION EARTHQUAKE IN PASAMAN BARAT



Oseanland Survei Indonesia cooperate with Meteorological, Climatological, and Geophysical Agency (BMKG) in identifying the source of Earthquake in West Pasaman (February 2022).



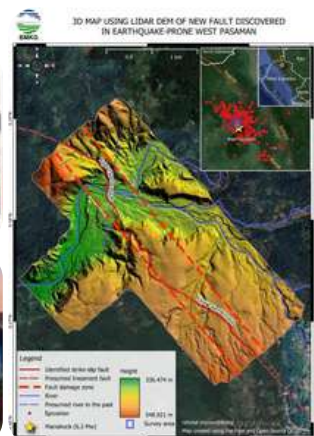
On 25 February 2022, a moment magnitude 6.2 earthquake struck West Sumatra, Indonesia. A survey by the Indonesian National Board for Disaster Management (BNPB), revealed 1,075 seriously damaged, 3,447 moderately damaged, and 2,105 slightly damaged homes. In addition, 70 religious buildings, 208 educational facilities, and 25 health facilities were also damaged.

Therefore, mitigation measures are needed in anticipation of another earthquake. Mitigation can be done by geomorphological investigation using DEM data. High resolution DEM data can be obtained using LiDAR technology which is installed via the UAV vehicle because it is considered appropriate to collect data safely and quickly.

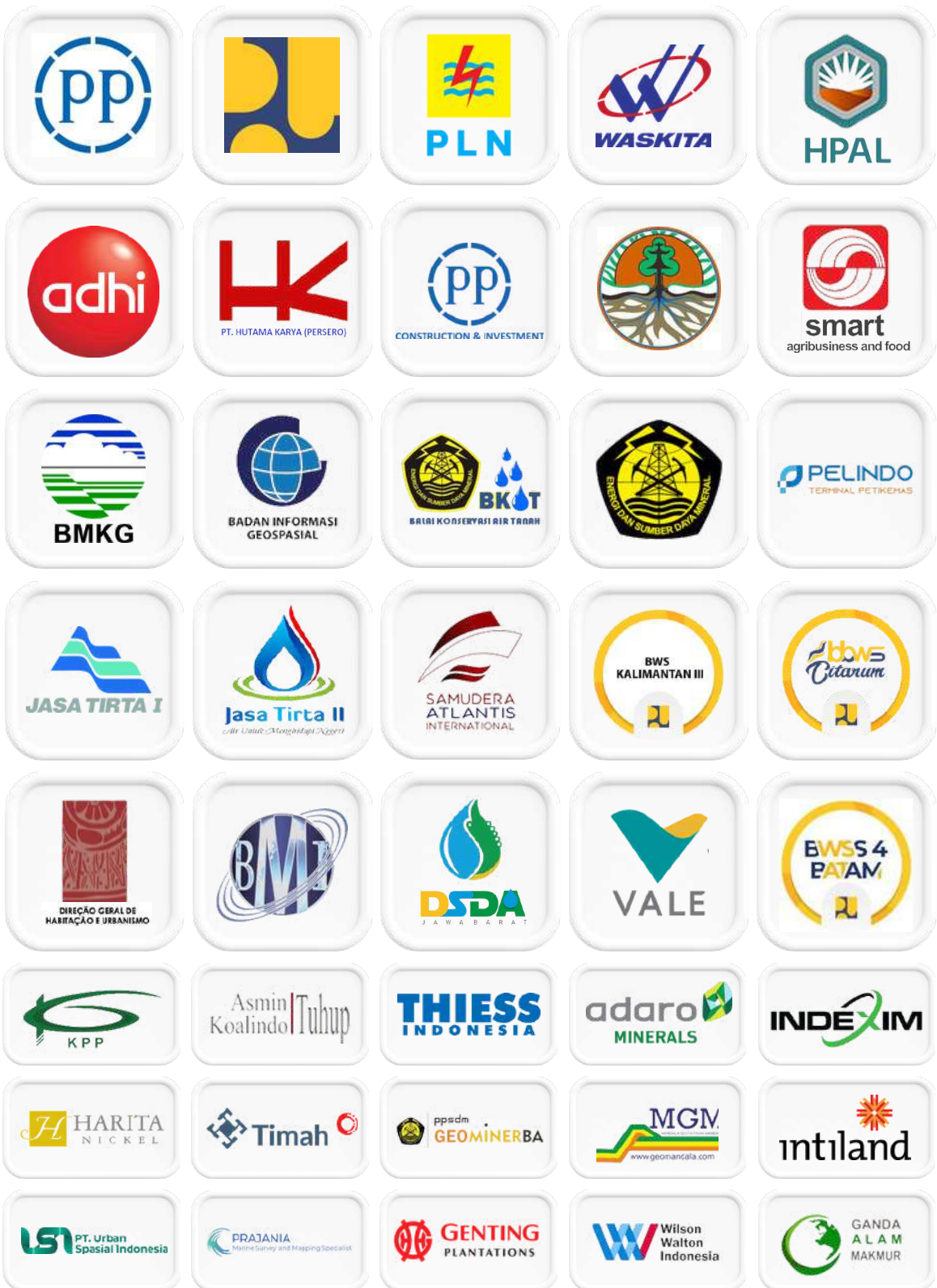
Mapping survey were conducted by Oseanland with BMKG in Talamau, West Pasaman on March 22-24 2022. Technology that used to support this activity is the **DJI Zenmuse L1 LiDAR sensor and the DJI Matrice 300 RTK Drone**.

The **results** found out that a new strike-slip fault line was identified in the earthquake area.

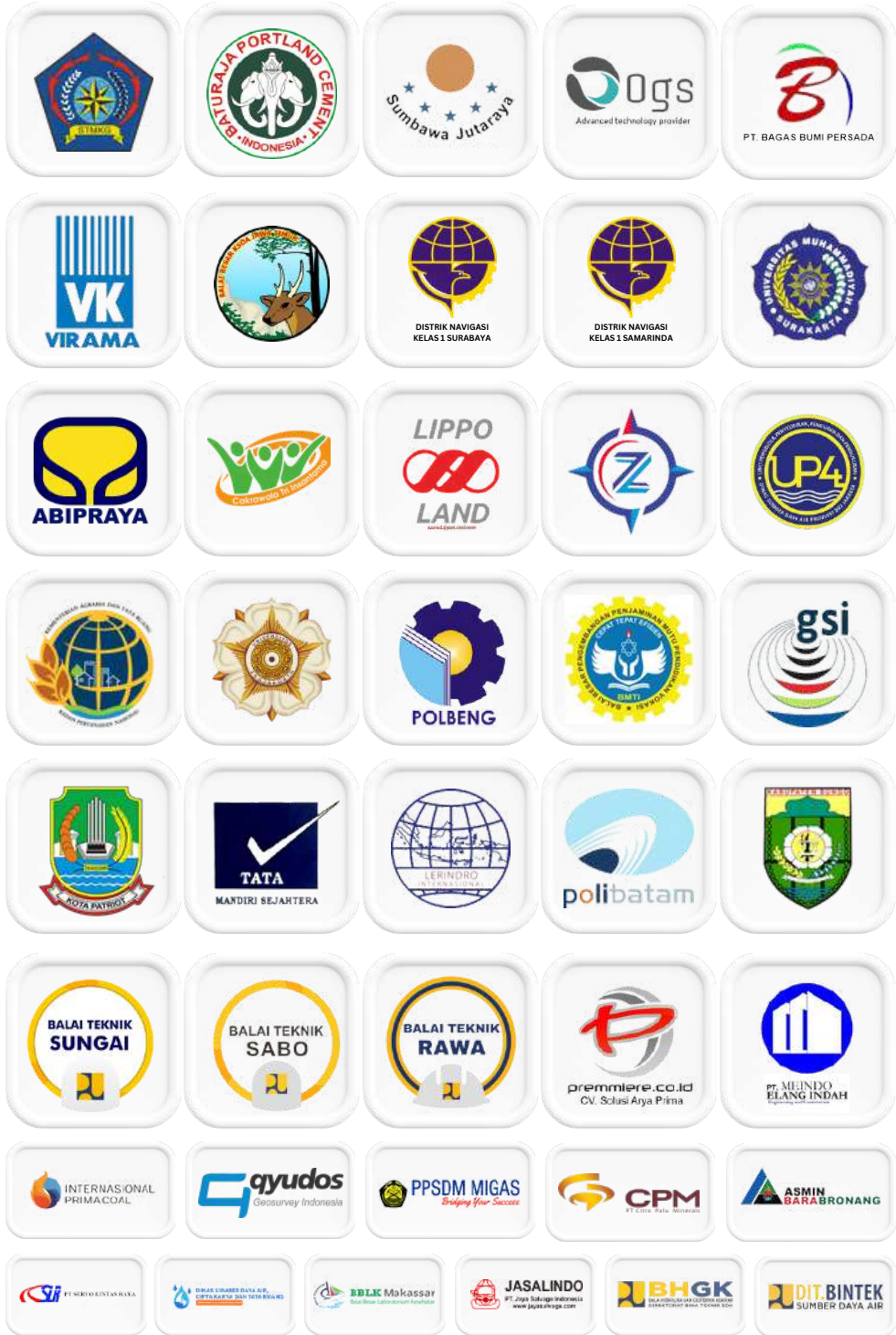
This mapping activity proves that latest technology have a positive impact on people's lives, primarily in the field of disaster mitigation.



Our Valuable CUSTOMER



Our Valuable CUSTOMER





HEAD OFFICE

Ruko Sentra Menteng Bintaro Sektor VII Blok MN No. 10 Pondok Jaya, Kec. Pondok Aren, Kota Tangerang Selatan, Banten, 15220



WORKSHOP

Ruko Sentra Menteng Bintaro Sektor VII Blok MN No. 63 Pondok Jaya, Kec. Pondok Aren, Kota Tangerang Selatan, Banten, 15220

