GEOSPATIAL SOLUTIONS

Aptella
AUTOMATION + POSITIONING TECH

Why Aptella

We're there when you need us

With more than 30 years' experience in deploying intelligent positioning solutions, Aptella and its founding businesses have continuously broken new ground in the application of technology to supply survey solutions or software and reporting options that give you eyes on the job at every stage of the project, we offer customised and tailored solutions to match your application needs.

Aptella's expert team is unrivalled in the industry - our people are passionate about what they do and committed to supporting our customers whenever and wherever they're working.

With more than 400 employees across Australia, New Zealand and Southeast Asia, no other company can deliver the depth of expertise and boots on the ground support that Aptella has to offer. We source the latest and most advanced technology from leading suppliers worldwide, ensuring it is fit for the local market and assisting customers with training, service, calibration and support to suit their unique business needs.

Learn more about us

Workshop services

Comprehensive product service, maintenance, repairs and advice are provided via our local service centres with manufacturer-trained technicians. We guarantee all our work and can supply calibration certificates if required.

Training

Our expert trainers are here to help you get productive immediately and enable you to take control of your digital jobsite. Our training is application specific and tailored to your industry, providing the perfect foundations to tackle any task or project.

Hire or lease options

A full range of systems, from laser levels through to machine systems and survey instruments, can be hired or leased to suit any application and reduce capital outlay. Get the flexibility to customise technology to suit unique site requirements.

Positioning Solutions

Helps Your Business Grow

Employee training is a valuable investment in the growth of every business. When equipment or software is first delivered, users typically receive basic instruction and advice from suppliers to get them 'up and running.' Once the basics are mastered, however, they will benefit greatly from further training to learn the full system capabilities so that they can optimise their performance and increase output.

Aptella Academy training courses give customers the ability to improve their knowledge through formal structured learning and are combined with field exercises where appropriate. Course costs are kept to a minimum so that they are an affordable way for customers to improve their skills whilst maximising benefits for their company.

Support

Technology can be a wonderful enabler and productivity booster, but when a system isn't working the way you expect or you are having trouble customising it to your needs, it can quickly become frustrating and time consuming.

Aptella is here to ensure you get maximum up-time and efficiency from the technology you purchase or rent from us. Our multi-skilled team has extensive technical and on-the-job experience and we work with you to deeply understand your requirements and objectives before matching you with an ideal solution.

Our field services team offers boots-on-the-ground support, calibrations, troubleshooting and more, with teams located throughout Australia, New Zealand and Southeast Asia.

Tokara is a service developed and managed by Aptella to give customers quick, efficient support wherever they're working.

Support contracts are available across the product range and can be scaled to any size of company to offer value for money and faster return on investment on your equipment.

tokara

Tokara

Fast, Responsive Support

At Aptella, we recognise that every project, site and customer has unique requirements, so we have created a modular solution to meet the evolving demands of your business.

Tokara is a scalable and expandable remote service that uses both web and server infrastructure to provide real-time support and training solution for our geospatial solutions.

Tokara is a turn-key service providing the data plan, server infrastructure, user interface and expert support.

With the power to monitor, service and control your assets from the office and in real-time, Tokara guarantees a safer and more efficient working environment.

AllDayRTK
Enabling Geo-Precision

AllDayRTK

Enabling Geo-Precision

AllDayRTK is a Continuously Operating Reference Station (CORS) network providing accurate Network RTK positioning services throughout Australia and New Zealand. AllDayRTK benefits all industries requiring accurate, reliable GNSS positioning. AllDayRTK delivers cm-level accuracy anywhere within a networked area, eliminating the need to setup and maintain a temporary base station.

Aptella has established an extensive network of Continuously Operating Reference Stations (CORS). In addition, we have collaborated with network RTK providers right around Australia, including state-owned infrastructure networks such as CORSnet and VICpos.

AllDayRTK provides a seamless link between these networks to bring you the most comprehensive network RTK solution available.

Land Surveying

Measure with confidence, knowing that you are where you need to be. From reliable two person optical setups, to fully robotic systems, as well as integrated GNSS receivers – our wide array of surveying products are powered by intuitive software solutions.

As job sites and conditions change, our GNSS receivers are versatile enough for any field requirement.

- Topography
- Cadastre
- Boundaries
- Sub-division
- As-built

Using Hybrid Positioning™ technology that combines robotic total stations with GNSS receivers, known for speed and repeatability – leverages the best of both worlds to improve productivity and give you performance in any environment.

Civil Engineering

Control data flow, protect integrity, and improve communication between field and office as design concepts come to life, and stakeout to transform models into reality.

Our partnerships with CAD solution providers across the globe allow design files to move quickly from engineers to your mobile workforce, improving information management throughout the design and build process.

For extremely accurate layout and quick grade checks, combine our GNSS receivers with a proven optical total station.

- Design compliance verification
- Site and road set-out
- As constructed reporting
- Volume calculations
- Claims measuring
- Quality control

Construction Set Out

Get the job done right at each stage, from basic staking to project completion. Our software combined with field-ready GNSS receivers for rough stakeout and high-end optical equipment for precise work offer a broad array of positioning solutions for all of your construction set out needs.

While navigating to a design point, our software visually verifies when your custom tolerances have been met, and quick confidence checks prepare you for the next stage.

Close the loop between field and office while ensuring quality control though Topcon secure web services. Instantly generate customisable reports from the field that can be sent instantly to office personnel — a city, a state, or a country away.

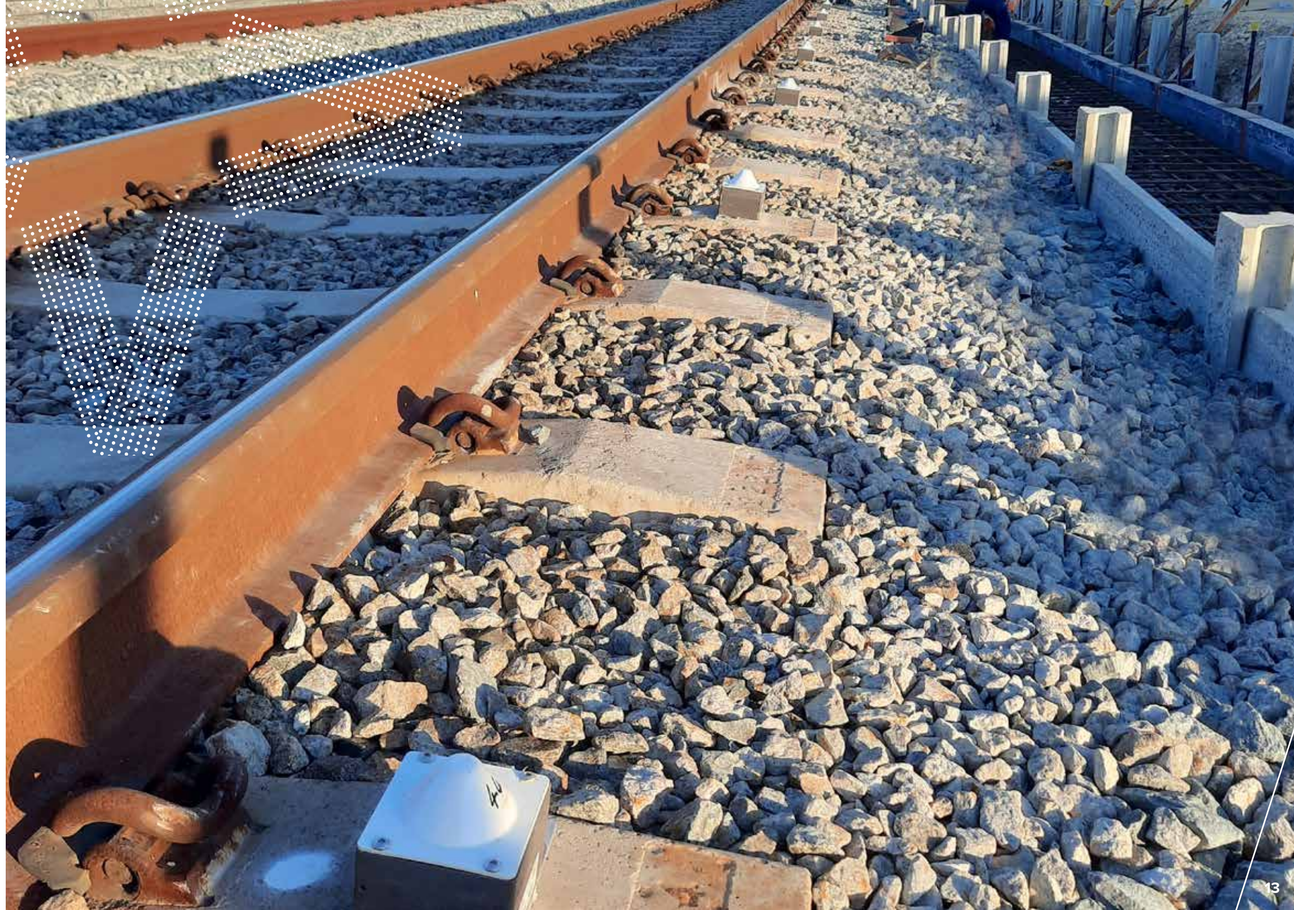
Deformation Monitoring and Geoscience Applications

Track and use all satellite constellations and signals currently available as well as proposed signals. Our GNSS network systems are secure web services that are scalable and easily supported.

Monitor Deformation and Elevate Safety

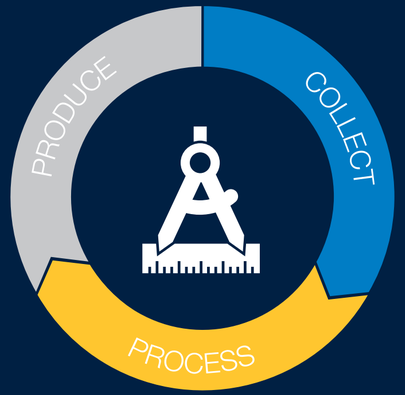
Quantify deformation movement at sub-millimetre accuracy to identify even the smallest changes in displacement and increase site safety on high-risk monitoring projects.

Our proven, easy to deploy, robust and extremely long-life systems are the benchmark for wireless Remote Condition Monitoring (RCM) solutions for the Construction, Rail, Mining and Infrastructure industries.



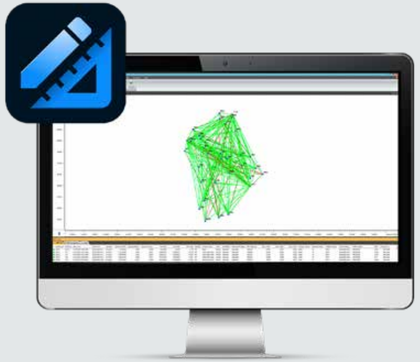
A Better Way To Work

Modernise your workflow for field, office, and management teams with our Topcon Enterprise global web services. Easy connectivity with your field crews and equipment results in measured productivity that is custom built for you.



COLLECT → PROCESS → PRODUCE

We provide you with the right solutions based on our years of experience in the field. You're in control where and when you need it with colourful and graphical software that supports a vast library of industry file formats.



No project is an island, teamwork is what produces success – the Topcon system was designed with this in mind, bringing together field, office, and managers in a single secure environment. Instant data transfer from active job sites is the new normal for office staff to process and for management to oversee.

No matter what your role is in your company, the modern Topcon system has evolved with productivity in mind. Field crews move with confidence at the job site driving all the geospatial hardware, office staff process and support with ease, while the managers keep an eye on time and budget.

Precision Hybrid Positioning

GT series total station systems are a powerful asset to any field measurement project.

Simply add a powerful, rugged GNSS receiver like the HiPer HR and you now have the no compromise solution of Hybrid Positioning.

For maximum efficiency, pre-installed Topcon Field data collection software helps you to seamlessly switch between GNSS and robotic mode options.

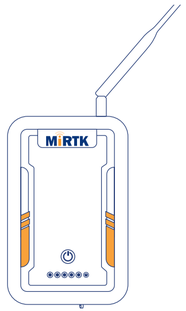
Hybrid Positioning™ systems perform faster in the field than stand-alone robotic systems, with more versatility than RTK-only solutions. You get added productivity at every phase of a project, regardless of the job site conditions.

MiRTK

MiRTK Internet Enabled Correction Service

MiRTK offers an alternative to UHF radios. It delivers the same RTK accuracy correction data from your GNSS base station with some key benefits:

- Works with all brands of GNSS
- Simple Hardware as a Service solution – no complex licensing
- Single protocol for multiple devices on site – unlimited connection to machine control, GNSS rovers and other devices requiring RTK positioning



AllDayRTK FOCUS

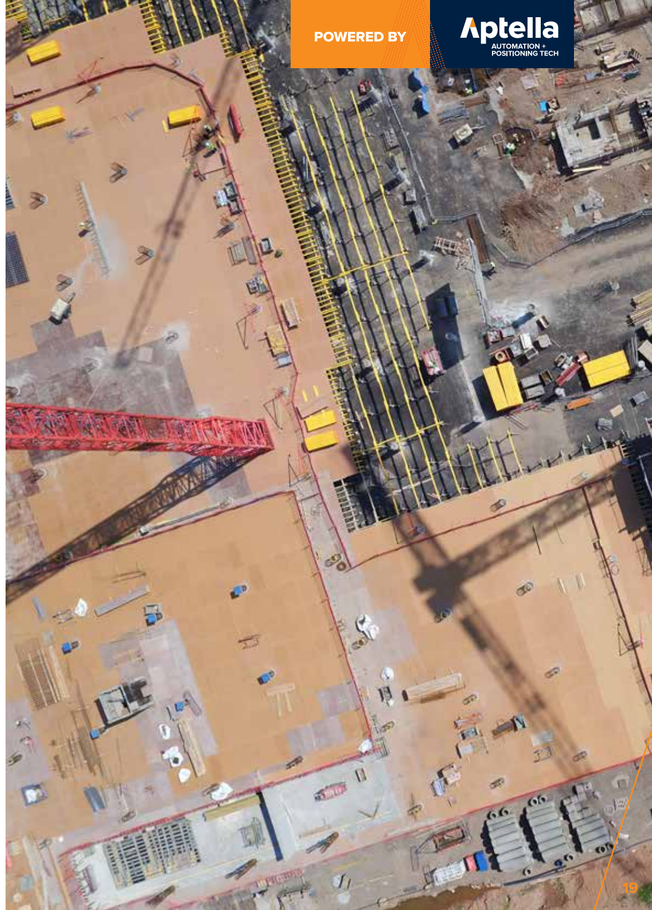
AllDayRTK Plug-n-Play Kit

The Aptella AllDayRTK team have developed a new modular network base station concept called Plug-n-Play (P&P). Designed to be robust, reliable, professional build quality, high accuracy positioning solution.

With a choice of GNSS and telecommunication components such as being Starlink ready, the P&P base kit is future-proof and technically agile.

Managed remotely through the AllDayRTK platform to maximise uptime and signal availability; just plug it in and let our team do the rest!

- Agile high accuracy AllDayRTK Focus network base solution
- Future-proof GNSS hardware with multi-GNSS support
- Dual SIM 4G LTE communications and Starlink ready
- Professional build, robust and reliable design



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Network and GNSS Productivity

Multiple subscription based GNSS correction solutions are designed to provide productivity 24/7 with:

Universal Tracking Channels

Topcon's patented Universal Tracking Channels™ technology provides the industry's most efficient approach towards identifying and using each and every satellite constellation and signal. Any constellation and any signal can be used in any available channel. Thus reaching maximum performance with a reduced number of channels.

Topcon GNSS receivers are the only ones to use Universal Tracking Channels technology, automatically ensuring optimum reception of all GNSS satellite signals.

HiPer HR

Advanced GNSS Receiver

Part of our Elite Survey suite, it's highly configurable and designed to grow with you. You can track every satellite signal above, and handle any job that comes your way.

- Next generation Fence Antenna® technology for superior reception
- Unique 9-axis TILT™ compensation
- Internal Wi-Fi and multi-spectrum Bluetooth®
- LongLink™ interference-free communication, up to 300m range

HiPer XR

Cross Platform Receiver

The HiPer XR's lightweight design ensures effortless portability, allowing professionals to work efficiently across diverse job sites. Its multi-constellation support delivers improved accuracy by tracking multiple satellite systems simultaneously, ensuring reliable data even in complex conditions.

- Calibration-free and immune to magnetic interference tilt compensation up to 60°
- GNSS interference monitoring and mitigation technology for anti-jamming and anti-spoofing
- Improved RTK performance for more reliable results

HiPer CR

Site Receiver

Get precise centimeter-level accuracy effortlessly with this compact powerhouse, ideal for various survey and construction tasks. The HiPer CR is an ultra-lightweight and compact solution that minimizes pole weight, ensuring easy mobility and field usability. Despite its small size, the HiPer CR integrated helical antenna excels in challenging canopy and jobsite environments, delivering exceptional performance.

- RTK high-performance positioning
- Up to 10-hour battery life
- Longlink™ Bluetooth®

NET-G5

GNSS Reference Receiver

Born to perform within a reference station network. If there is a navigational satellite up above, this receiver tracks and uses it. Ideal for when you're installing a new GNSS network infrastructure or upgrading an existing one, the NET-G5 is future-ready.

MR-2

Modular GNSS Receiver

Whether needing a modular mobile RTK base station, a receiver for marine navigation, or a positioning device for mobile mapping, the MR-2 by Topcon is your versatile solution.

SOKKIA

TERSUS GNSS

GCX3

GNSS Receiver

The GCX3 is the ideal local job site base/rover RTK (Real Time Kinematic) system or network RTK rover — and like all of our solutions, you can customise it to meet your needs and create your own workflows.

- All-in-view constellation GNSS receiver
- I226 optimised satellite tracking channels
- Compact, lightweight, rugged and cable-free design
- Ideal network RTK rover
- Wireless, multi-channel long-range Bluetooth® technology

GRX5

GNSS Receiver

The Sokkia GRX5 is smaller, lighter, and packed with the most advanced GNSS technology in a design built to withstand the harshest field environments. All signals, all satellites and all constellations — in a compact, rugged design, with an integrated IMU and 4G cell modem.

- Sokkia Tilt Technology up to 60°
- Anti-jamming and anti-spoofing capabilities
- 448 channels covering all modernised signals (GPS, GLONASS, Galileo, BeiDou, IRNSS, QZSS, SBAS)
- Available with integrated UHF radio

Tersus Luka

GNSS Receiver

This versatile receiver offers high-accuracy tilt compensation, supports all satellite constellations and goes the distance with up to 19 hours' battery run-time.

- Compatible with 12D Field and Carlson SurvPC
- Backed by 3-year warranty and local servicing from Aptella
- Customised features for Australian market
- All constellations
- AllDayRTK network-ready

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Survey Tablets

Application Ready, Solution Oriented

With best-in-class features including an ultra-rugged ergonomic design, sunlight-readable display, and all-day battery life, Topcon & Sokkia rugged tablets provide the ultimate device for a variety of mobile data collection applications.

Waterproof, dustproof and shockproof, each rugged tablet goes through extensive testing to ensure it's built ultra-tough for unwavering reliability in the harshest work environments out there. With the highest certified protection against water and dust, the Rugged Tablets are stamped with an impressive IP68 rating and is designed to exceed MIL-STD-810G for water, humidity, sand and dust, vibration, altitude, shock, and temperature.

Translation? This thing is built like a tank. No matter if you're working in hot, cold, wet, or dusty conditions, our rugged tablet range is your office, anywhere.

Expand Your Horizons

Topcon exclusive LongLink™ communication technology is built into the FC-6400 and provides the ability to connect and drive Topcon total stations and GNSS receivers wirelessly out to 500 metres.

TOPCON

SOKKIA

FC-6400 / SHC6400

the 6400 rugged tablet is built with your productivity in mind. When the weather throws you a new challenge, use your fingertips, gloves, or a smalltipped,optically bonded stylus to remain in control even while working in wet conditions.

- Sunlight-readable 7-inch display
- Intel® N200 3.7 GHz processor
- MIL-STD-810H and IP68 certified
- Windows® 11 Pro operating system
- 13 MP rear camera, 5 MP front camera
- Integrated 4G LTE cellular module

External keyboard

Optional Accessory

The keyboard is designed for on-the-fly installation and quickly snaps onto the FC-6400/SHC6400; no tools required. It features tactile feedback, raised key, and full QWERTY keyboard. It is designed to improve performance of the FC-6400/SHC6400 in cold weather when operators are wearing gloves.

Panasonic Toughpad FZ-G2

Tablet Computer

The Panasonic Toughpad FZ-G2 is an advanced and durable tablet designed to excel in challenging work environments. This rugged tablet offers exceptional durability and reliability, making it an ideal choice for industries that require a robust device.

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Elite Survey Suite

Make your jobs faster, easier, and more profitable with our Elite Survey Suite hybrid positioning solution – the GT Series robotic total station, HiPer HR advanced GNSS receiver, FC-6400 field computer, and Topcon software.

This is one powerful Hybrid Positioning™ solution. Measurements are easier and faster, you'll move and capture from point to point more quickly than ever before. Your controller interface is easy to read and navigate with a better communications range so you can do more work with fewer setups.

And you're backed by powerful software that simplifies your project process while securely connecting field to office. Whether your company uses Autodesk, Bentley, or Topcon, the integration is seamless.

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GT Series

Robotic Total Station

Not every job is easy, and locating critical features isn't always straightforward. When accuracy matters, the GT-1500/700 robotic total station delivers precise data collection and layout, helping you stay on budget and avoid costly mistakes.

With flexible 2-man or 1-man operation, the GT-1500/700 robotic total station provides for superior data collection and layout of critical items. Its intelligent Brushless Direct Current (BLDC) motor ensures smooth, silent operation with less wear and tear – extending the instrument's lifespan. Combine with GNSS and create a hybrid solution that allows for the most versatile method of positioning in the industry.

GT-700

Perfect for cadastral and land surveying. The 700 series is the ultimate choice for power and versitility

- Available in 2", 3" & 5" (0.6, 1.0, 1.5) mgon
- EDM range of 4,500m
- Non-prism range of 800m
- EDM accuracy 2mm + 2 ppm
- Turning speed of 120 degrees per second

GT-1500

The high accuracy EDM also makes this series the ultimate instrument for concrete and bolt setout application.

- Available in 1", 2" & 3" (0.3, 0.6, 1.0) mgon
- EDM range of 5,000m
- Non-prism range of 1,000m
- EDM accuracy 1mm + 2 ppm
- EDM accuracy with Prism 1mm + 2ppm
- Turning speed of 200 degrees per second

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RC-5A

No matter whose robotic instrument you operate there will always be instances during field work of loss of lock between the robotic station and the user at the robotic pole.

The Topcon solution provides the fastest and simplest method of establishing prism lock between the instrument and the robotic pole offering an effortless “single tap” within the field software!

LN Series

3D Setout Intrument

The world’s first 3D positioning system designed specifically for construction setout.

The first time you see it you know it’s unlike anything you’ve seen before. Its clean, innovative design tells you that the LN Series is a game changer. The LN Series strips away complexity to deliver an easy-to-use tool dedicated to construction layout. The LN Series utilises Topcon’s time-proven laser and robotic total station technologies to create a totally new tool that’s easy to use, without sacrificing the accuracy and versatility demanded for all types of construction layout.

MS AXII Series

High Accuracy Measuring Station

In addition to natural hazards, such as harsh weather, soil movement or change of ground water level, engineering structures, such as buildings, dams, tunnels and bridges can always be affected by movement caused by excavation, heavy construction and piling placement. The MS Series provides superior measuring precision and is equipped with environmental protection and functions necessary in monitoring applications, allowing it to be utilised in a high-precision monitoring solution.

SOKKIA

iX Series

The Ultimate Robotic Total Station

With the iX-1500/iX-700, you get the efficiency of a single-operator robotic system, the power of long-range reflectorless measurements, and the versatility of Hybrid Positioning™, all in your choice of 1”, 3” or 5” iX-1500 models or 2”, 3” or 5” iX-700 models.

- 10 Hz update rates for faster more efficient staking
- 150°/sec turning speed for exceptional productivity
- Compact and lightweight for easier handling on site
- Stay productive, stay confident with UltraTracTM prism lock technology
- GNSS hybrid ready so you can handle any job site
- Five-year Brushless Direct Control (BLDC) motor warranty

iX-700

Perfect for cadastral and land surveying. The 700 series is the ultimate choice for power and versitility.

- Available in 2”, 3” & 5”
- Max EDM range of 4,000m
- Non-prism range of 600m
- EDM accuracy 2mm + 2 ppm
- Turning speed of 85 degrees per second

iX-1500

The high accuracy EDM also makes this series the ultimate instrument for concrete and bolt setout application.

- Available in 1”, 2” & 3”
- Max EDM range of up to 6,000m
- Non-prism range of 800m
- EDM accuracy 1mm + 2 ppm
- EDM accuracy Non-prism 2mm + 2ppm
- Turning speed of 150 degrees per second

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RC-PR5A

No matter whose robotic instrument you operate there will always be instances during field work of loss of lock between the robotic station and the us er at the robotic pole.

The Sokkia solution provides the fastest and simplest method of establishing prism lock between the instrument and the robotic pole offering an effortless “single tap” within the field software!

NET AXII

Industrial Monitoring & Measurement

Engineering structures, such as buildings, dams, tunnels and bridges, canalways be affected by movement caused by excavation, heavy construction and piling placement – in addition to natural hazards, such as harsh weather, soil movement, change of ground water level or any number of other factors. The NET Series provides superior measuring precision and is equipped with environmental protection and various functions necessary in high-precision monitoring applications.

TOPCON

SOKKIA

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Optical Total Stations

Precision + Usability

Get precise, consistent results every time. We offer the first and only optical robotic communication systems featuring dual-optical reflectorless operation, on-board Windows®, and wireless remote data collection.

Our legendary optics and durability combined with leading communication technology improve measurement performance every day. Get superb prism tracking with built-in security as a standard feature on the most powerful optical total station systems available.

GM-50 Series

Reflectorless Total Station

The GM-50 Series was designed from the ground up to deliver the very latest technological advantages, all in a small, sleek design – you'll appreciate the advantages from the very first measurement.

- Fast and accurate new EDM
- Bluetooth® communications (optional)
- Advanced angle accuracy
- Long battery life – 14 hours
- Rugged, waterproof design with IP66 rating
- 500m long-range reflectorless measurement

GM-100 Series

Manual Total Station

The GM-100 series was designed from the ground up to deliver the very latest technological advantages, all in a small, sleek design – you'll appreciate the advantages from the very first measurement.

- Advanced security and maintenance with TSshield™
- Fast and powerful EDM
- Advanced angle accuracy
- Long battery life – 28 hours (Eco mode)
- Rugged, waterproof design

OS Series

On-board Total Station

The OS is a professional grade compact total station. This advanced design provides an on-board data collection interface, exclusive LongLink™ communication, and an incredibly powerful EDM.

- Advanced security and maintenance with TSshield™
- Topcon Field on-board
- Exclusive LongLink™ communications
- Fast and powerful EDM
- Advanced angle accuracy

iM-50 Series

Intelligent Measurement

The iM-50 Series offers the perfect entry-level site layout and survey instrument. The sleek and light iM-50 is made with superior Japanese quality and design, and built with exceptional function and form in mind.

- Integrated construction and survey application software
- Fast, accurate, and powerful EDM
- Reflectorless up to 500m
- Prism range up to 4,000m
- Advanced angle accuracy (2" or 5")

iM-100 Series

Total Station

Easy-to-use, highly accurate, rugged, and reliable the iM-100 manual total station is perfect for entry-level site layout and surveying. The iM-100 is built to be your hardest worker, made to withstand even the toughest conditions and providing up to 28 hours of battery life.

- Fast, accurate, and powerful EDM
- Reflectorless up to 800m
- Dual-axis compensation
- Waterproof IP66 rating
- Up to 28 hours in battery life

FX Series

Advanced Total Station

Take charge of job sites with world-class accuracy, the FX is ready for whatever you need to accomplish. This professional grade advanced total station provides an on-board data collection interface, long-range communication, and an incredibly powerful EDM.

- Lightweight, compact body
- RED-tech technology reflectorless EDM
- Long-range Bluetooth® technology
- Advanced angle measurement system
- Long-lasting battery
- Waterproof, rugged, and user-friendly

DL-500 Series

Electronic Digital Levels

The Topcon DL-500 Series digital levels maximise work efficiency and minimise human error, providing consistent measurement precision and speed, regardless of operator skill.

Incorporating cutting-edge Random-Bidirectional (RAB) coding technology and an optimised digital processing algorithm, the DL-500 provides exceptional measurement accuracy, stability and speed under a variety of environmental conditions. Even when the staff surface is partially shaded, or in dim lighting conditions as low as 20 lux, a single button triggers measurement and the DL-500 instantly provides reliable results.

DL-502 and DL-503

Quick. Easy. Reliable

The DL-500 range of digital levels from Topcon strips away the main sources of errors in leveling by integrating RAB (Random-Bidirectional) staff encoding and “Wave-and-Read” technologies.

- One button triggers measurement and data storage
- 0.6mm/0.8mm height accuracy
- “Wave-and-Read” technology guarantees easy and accurate measurement
- Pre-installed measurement programs, height difference measurement
- Inverse staff reading for ceiling height
- Internal memory

DL-501 Series

World Highest Precision Digital Level

The DL-501 Series incorporates an array of advanced technologies to achieve the highest leveling accuracy in the industry.

- RAB-Code technology, superior optics, market-proven compensator and magnetic damping system ensure precise staff readings.
- Dual-axis compensator notifies instrument tilt, Remote Trigger prevents accidental jolts, and Auto Focus (DL-501 Advanced model) eliminates incomplete focusing. These unique technologies remove major error factors.
- Even in the dim light conditions, if the staff surface brightness is 20lx or more, the DL-501 series can read the staffs without compromising accuracy.
- 0.2mm precision
- Auto Focus
- 2.5sec High Speed Measuremer
- 20Lxc Minimum Brightness
- Dual Axis Tile Sensor
- Line Level Program
- 10,000 Points Internal Program
- SD/SDHC card & USB port

SDL Series

Digital Level

The SDL30/SDL50 is an accurate, dependable digital level that combines user-friendly convenience with maximum functionality. All you have to do is aim the staff, adjust the focus, and then with a single touch of a key the SDL30/SDL50 accurately measures height and distance. The results are easy to see on the LCD display.

- High-speed measurement
- Consistent performance
- Water and shock resistant
- 2,000 point internal memory

SDL30 and SDL50

Quick. Easy. Accurate

The SDL30 & 50 from Sokkia strips away the main sources of errors in leveling by integrating RAB (Random-Bidirectional) staff encoding and “Wave-and-Read” technologies.

- Reliable, easy to use digital level ideal for the construction field.
- Employs a market proven pendulum compensator with magnetic damping system. Its working range is ±15.
- Incorporates the convenient programs to help speed up construction work.
- The internal memory holds 2,000 points of data in a maximum of 20 job files.
- Measured data can be exported in CSV format using the software “SDL TOOL”.

SDL1X

High-End Digital Levels

From Intelligent Auto Focus to wireless operation, many innovative technologies have been implemented for unmatched performance and precision.

The SDL1X can reduce measurement by up to 40% compared to manually focused digital levels! As well as this, its wireless remote trigger eliminates measurement errors caused by touching. When precision has top priority, and measurement speed matters, the SDL1X is the ideal digital level.

Key SDL1X features include:

- 0.2mm precision (ISO17123-2)
- Intelligent auto focusing
- Dual-axis tilt sensor safeguards precision
- On-board measurement and recording programs
- 10,000 point memory with USB and SD card slot
- Optional Bluetooth® wireless for connection to data collectors

Connectivity + Integration

Connect your projects and entire teams from field to office, in real-time.

Our software productivity suite simplifies your project process and allows your team to work seamlessly. From CAD data integration capabilities, to real-time data exchange between office and field, and so much more.

Combining our software and GNSS and optical products streamlines the workflow for surveyors, contractors, engineers, and mapping professionals.

Topcon Field

Software

Powerful and intuitive field application software that enables you to collect survey-mapping data. Field and office teams can exchange files and communicate in real-time.

- Graphical intuitive software with low learning curve
- Direct connection to secure company account
- Microsoft Bing Maps® for satellite image background

Topcon Enterprise

Software

Get field results to managers and supervisors in real-time. Create geo-referenced projects for team-based collaboration and log in from any browser to see the site in action.

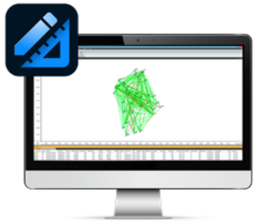
- Plan project tasks and visualise completed work
- Keep pace with each project's progress
- Secure web service with real-time exchange

Topcon Tools

Software

Data processing software that generates final coordinates from measurements taken using Topcon Field and Pocket 3D software driving any of our total stations, digital levels, and GNSS solutions.

- Process GNSS and total station field measurements
- Visualise field work in Google Earth, 3D orbital view, CAD view, and more
- Create code libraries and generate customised reports

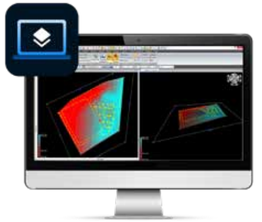


Topcon Office + Survey

Software

Produce finished surveys with customisable drafting, design, and processing tools for property plots, sub-division design, and land development projects.

- Full sub-division design tools
- Contour and surface creation, volumetrics, and automated pad design
- User-defined title blocks, symbols, and linetypes



Topcon Office + Site Prep

Software

Topcon Site is a fully featured constructible model and survey software solution for any machine control, land development and road design project.

It is the proven software solution for contractors and 3D model builders thanks to its customisable options and comprehensive editing capabilities. Easily elevate 2D plans and create 3D road and site models from CAD or PDF files. Simplify complex road design projects and enable the streamlined design of road corridors, highways and intersections.

Autonomous Construction Site Set-out

HP SitePrint

This groundbreaking solution in construction site layout is transforming how geospatial service providers deliver set-out. HP SitePrint brings unparalleled accuracy, speed, and consistency to site layout—helping you deliver more value, with less effort.

Learn more

Save time and revolutionise the way you deliver set-out to your clients

- Rapidly translate digital plans to physical layout on-site
- Reduce rework and improve confidence in every mark
- Redeploy labour to focus on other tasks

Focus on project-critical survey tasks while SitePrint does the grunt work

- Let SitePrint handle repetitive marking tasks
- Free up your surveyors to focus on QA, data capture, or prepping plans for tomorrow's job
- Reduce fatigue and manual workload on-site

All-in-one workflow: set-out, capture, process, and print

- Set-out on site, capture existing surface data, and process results in one seamless operation
- Print elevation deviations and floor flatness data immediately on-site
- Deliver faster insights and tighter feedback loops to your clients, setting yourself apart

TinyMobileRobots

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TinySurveyor Terra

Tiny Surveyor Terra is a robotic pre-marker tool that will save you time, increase safety and enable you to mark out road lines automatically. With the ability to interface to any GNSS or total station for precise height measurements, the Tiny Surveyor is a versatile and reliable tool that works for eight hours on a single charge.

Upload your design file via USB to the app and watch as the Tiny Surveyor completes the marking work for you. The Samsung tablet enables you to stay in control at all times and its high weatherproof rating ensures the Tiny Surveyor can work in even the toughest environments.

TinySurveyor Plotter

TinySurveyor Plotter is designed for roadworks on even surfaces such as new concrete layers in road construction. The compact design makes it easy to transport and deploy. The high-visibility safety beacon and ultrasound sensors allow the robot to operate safely in spaces with live traffic or other equipment.

Reality Capture

Our range of terrestrial 3D laser scanners are best in class for indoor and outdoor applications, including long range capability as required. Our solutions include NavVis wearable mapping instruments and Z+F terrestrial scanning systems. With a wide range of supporting software platforms, Aptella can tailor a laser scanning solution that delivers exceptional quality whatever your project needs.

NavVis

VLX3/MLX

NavVis VLX3/MLX is a mobile mapping system designed for laser scanning and AEC professionals that enables high-quality reality capture of complex buildings and construction sites.

Capture 3D measurements with two multi-layer LiDAR sensors in combination with industry-leading SLAM software to deliver survey-grade point cloud quality. Four cameras positioned on top of the device take high resolution images in every direction for complete 360 capture.

NavVis

IVION Core

A reality capture platform for laser scanning and AEC professionals. Manage your 3D scans with intuitive tools for creation, collaboration, and publication. NavVis IVION Core makes mobile mapping workflows more efficient, speeds up model creation and delivery, and adds value to your data.

Z+F Imager® 5024

Precision Scanning

The Z+F IMAGER® 5024 is a 3D laser scanner that meets the highest demands in complex surveying projects. It impresses with maximum flexibility, stability, and precision, both in close-range and mid-range applications up to a range from 80 to 365 meters depending on the version. Thanks to its versatile features, it is suitable for a wide range of applications.

Z+F LaserControl® Office

How we build reality

LaserControl® gives extended functions for registration, data visualisation and project management and planning tools.

Various registration tools save time in the field and in the office, which are the striking benefits of this future orientated workflow.

XGRIDS Handheld Laser Scanner

Lixel L2 Pro

The Lixel L2 Pro is a highly integrated, high-precision handheld 3D reconstruction device featuring an all-in-one design and simple one-touch operation developed by XGRIDS. Utilizing self-developed 3D real-time reconstruction algorithms, it captures high-precision colorized point clouds. The device supports real-time viewing, enabling instant data collection and econstruction, with export-ready results.LiDAR Technology: Dual LiDAR scanners providing high-density 3D point cloud data at up to 640 thousand points per second.

- Increased point cloud density: Achieves 1mm point spacing for clearer details.
- With built-in panoramic camera, simplifying setup and operation.
- LiDAR for Precision Mapping: Equipped with a Class 1 laser operating at 905nm, the LiDAR sensor provides 1mm and 5mm LiDAR modes.
- Panoramic Cameras: Features 2×48MP cameras with a 190°×190° field of view, capturing high-resolution images to provide rich colour information and comprehensive visual context, ideal for visual positioning and scene documentation.

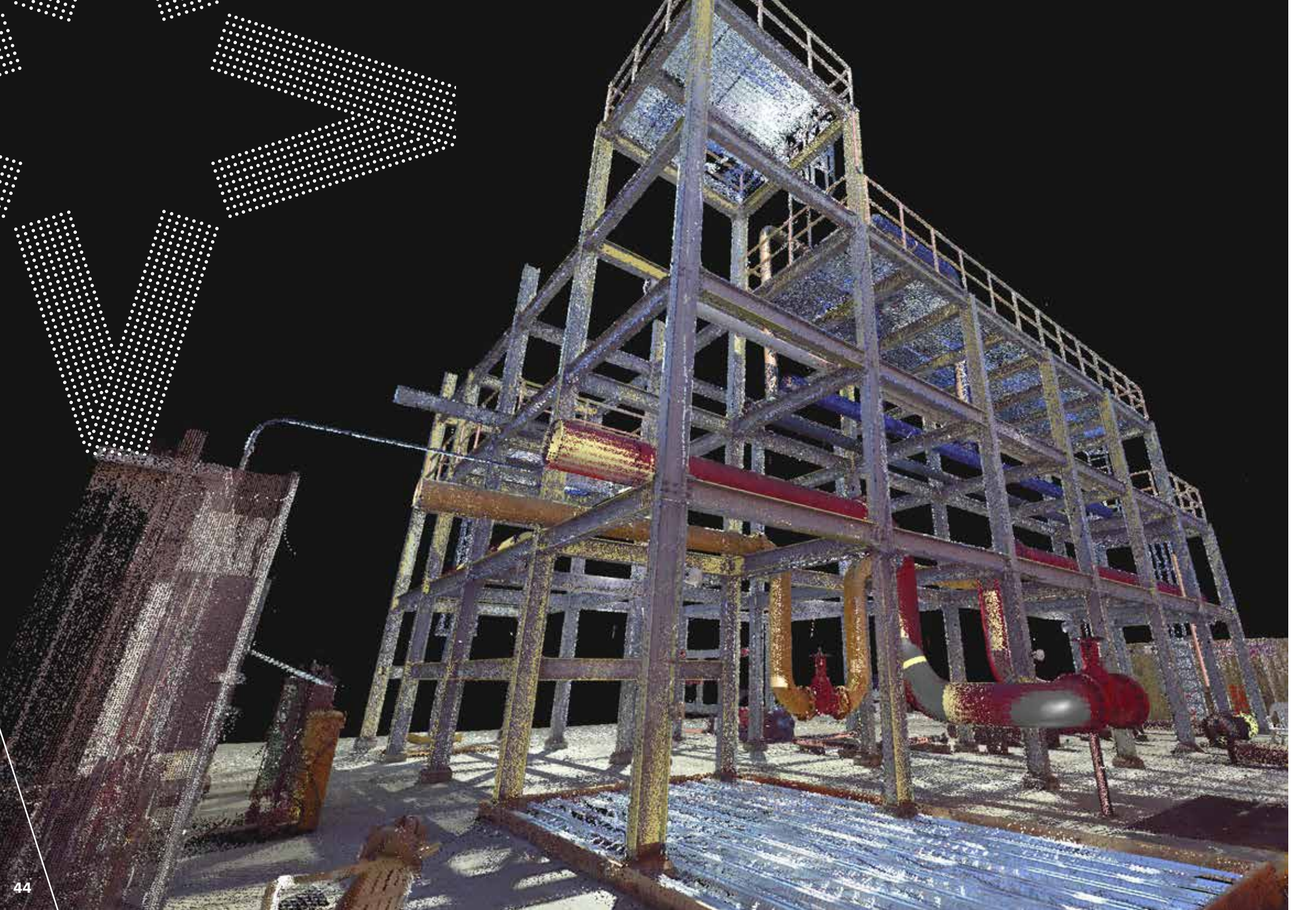
LixelKity K1

LixelKity K1 is a compact handheld scanning and modeling device newly introduced by XGRIDS. With a lightweight > kg body, it integrates 48 MP ×2 panoramic vision modules and a 360° LiDAR, capable of real-time generation of centimeter-level colored 3D models. Tailored for professionals, small to medium-sized businesses, and 3D enthusiasts, it offers a convenient solution for 3D capture and modeling.

PortalCam

PortalCam is the first handheld device that captures reality as interactive 3D environments using breakthrough 3D gaussian splatting technology.

It combines LiDAR, a four-camera array, and automated processing to create photorealistic special models you can walk through, edit and share across platforms.



CLEAREDGE3D

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EdgeWise

Modelling and Extraction Software

Model 3D as-built pipes, valves, flanges, structural elements, ducts, walls, tees, and conduit from point cloud data faster and more accurately than ever before!

EdgeWise uses groundbreaking algorithms that can automatically identify and extract walls and windows from point clouds and export them as Revit family objects. You'll save countless hours over creating as-built BIMs natively in Revit. time.

- Automated Extraction – Complete more than half of the model with zero man hours of work!
- Increased Workflow Efficiency – Edgewise improves scan-to-BIM/CAD workflow by up to 75%.
- Automated Modeling – Pattern recognition technology automates models of repeatable patterns.
- Direct Integration – Our software integrates seamlessly with Revit, Plant3D, PDMS, and CAD!

EDGEWISE

Verity

Construction Verification Software

It's estimated that 5% to 12% of a construction project budget is consumed by mistakes and rework. New software called Verity™ (from the makers of EdgeWise™) dramatically reduces this financial impact, resulting in reduced risk, more profitable construction projects, more accurate as-builts and fewer schedule delays.

Verity compares point clouds against design & fabrication models, allowing you to verify 100% of your work in the time it currently takes you to spot check 5%. The software helps you find construction mistakes before they become expensive problems.

VERITY

Professional Aerial Survey Tools

Aptella pioneered the introduction of Remotely Piloted Aircraft Systems (RPAS) for surveying applications in Australia. With unparalleled expertise in this new and innovative technology, you can be assured of the highest standards of expertise support, and remote support using Tokara on your drone controller, enabling you to maximise the benefits of aerial mapping for your application.

DJI Matrice 4 Series

Elevate Your Enterprise Operations

Introducing the DJI Matrice 4 Series, a compact and intelligent multi-sensor flagship drone lineup designed to revolutionise enterprise applications. This series includes two advanced models: the Matrice 4T (M4T) and the Matrice 4E (M4E), each tailored to meet specific industry needs.

DJI Matrice 400 RTK

Matrice 400's flight capabilities are outstanding, offering up to 59 minutes of forward flight time even with a payload, and up to 53 minutes of hovering duration. These capabilities make it a reliable tool for long-duration and continuous operations such as search and rescue, firefighting, and large-scale mapping. It can also avoid large obstacles like buildings and mountains at flight speeds of up to 25 m/s.

Trinity Pro

The Mapping Drone For Professionals

Trinity Pro is designed to adapt to changing requirements, evolve in capabilities, and accelerate decision making through aerial data. Future integrations like AI capabilities give new insights and help professionals in various industries to make more informed decisions and drive their business forward.

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Agisoft

VirtualSurveyor

Aerial Software

Agisoft Metashape

Agisoft Metashape is a stand-alone software product that performs photogrammetric processing of digital images and generates 3D spatial data to be used in GIS applications, cultural heritage documentation, and visual effects production as well as for indirect measurements of objects of various scales.

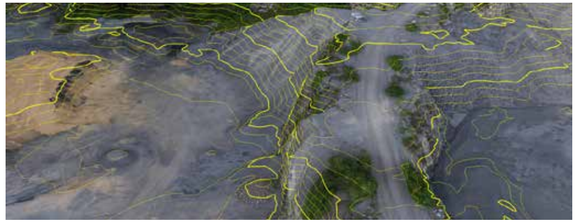
Wisely implemented digital photogrammetry technique enforced with computer vision methods results in smart automated processing system that, on the one hand, can be managed by a new-comer in the field of photogrammetry, yet, on the other hand, has a lot to offer to a specialist who can adjust the workflow to numerous specific tasks and different types of data. Throughout various case studies Metashape proves to produce quality and accurate results.

Virtual Surveyor

Virtual Surveyor enables you to stitch together digital elevation models and orthophotos to create interactive 3D models of the surveyed area.

Obtain more survey points and break lines than you would get with traditional survey methods and view your surveyed landscape with millimetre accuracy in a virtual environment.

- Convert your Remotely Piloted Aircraft (RPAS) data into realistic 3D terrains.
- Quickly calculate polygon volumes and export volume data using the volume export function.
- Analyse and measure the virtual environment just like you would in the field.
- 3D modelling to simulate future scenarios and their effects to the landscape.



Monitoring Solutions

Senceive Wireless Monitoring

Monitoring, data and knowledge are at the heart of making better decisions on assets. Understanding the state of an organisation's assets facilitates efficient, economic and safe operations. Substantial economies can be gained by the rail and construction industry in being able to monitor and predict degradation, schedule remedial action or to react quickly to accidents. Senceive are the only sensor manufacturer with both fast, short range and long range LoRaWAN solutions.

Safety Enhancing

- Reducing time within the rail corridor
- Easy to install, set-up and use
- Systems are entirely wireless

Minimal Whole Life Cost

- Same units re-usable for multiple applications
- Operational battery life of 12-15 years
- Maintenance and calibration free
- Reliable and proven over many years in field

Accurate, High Resolution, Stable and Repeatable

- High precision sensors with repeatability to ±0.0005°. Smart tilt sensors and cameras respond to movement to give you immediate insight of an event at a remote site
- Easy to use web based visualisation
- Multi-level text and email alerts

FlatMesh InfraGuard Innovation and Intelligence

InfraGuard not only tells you what your assets are doing - it shows you. Smart tilt sensors respond to movement to give you immediate insight of an event at a remote site.

- Integrated and triggered imaging and wireless solutions
- Intelligent solutions support decision making

Our systems are remotely configurable and customisable. They facilitate predictive remote asset knowledge and understanding to improve predictability ahead of failure, assets can be repaired, replaced or maintained ahead of catastrophic failures.

GeoWAN 2.0

The GeoWAN 2.0 LoRaWAN system is the most recent iteration of the existing LoRa solution provided by Senceive. Released with the full range of tilt, optical displacement, digital and interface nodes, the system is ideal for major project instrumentation integration. It is ideal for widely dispersed monitoring points, basements and congested urban environments.

- The new GeoWAN product line uses the same LoRaWAN connectivity platform as previous GeoWAN products
- Antenna fitted internally within the lid for improved protection and security (external possible to achieve greater distances if required)
- Range is class leading and has been field-tested to connect at up to 12km
- Clients can supply and change their own batteries in the field
- Clients can also supply their own LoRaWAN gateways

FlatMesh CameraHub

Experience next-generation visual monitoring with the FlatMesh CameraHub—Senceive's third-generation, solar-powered solution designed for remote and industrial environments. This fully integrated unit combines a high-quality digital camera with intelligent edge processing, delivering reliable static imagery and real-time insights in one compact device.

- Low-light monochrome camera for crisp day and night images—no external lighting required
- High-capacity rechargeable battery for long-lasting, autonomous operation
- Crystal-clear fixed-focus lens with advanced self-cleaning technology
- Intuitive interface and rugged design for effortless use in tough conditions

Monitoring Solutions

Omnidots

High Quality Vibration Monitoring

Are you concerned about the risk of vibrations causing damage to buildings and other structures? Monitor vibrations with the Omnidots solution! The “**SWARM**” vibration monitor, together with the cloud based “Honeycomb” web platform, provides you with insight to vibrations and helps you ensure that vibrations remain within the set limits. With Omnidots’ vibration monitoring solutions, you are in control of all your products, simply by using your smart phone, tablet or laptop.

Honeycomb Web Platform
Honeycomb is Omnidots’ cloud-based web platform that provides access to your measurement data and SWARM settings without the need to install any software. With Honeycomb there is no need to physically configure the SWARM or retrieve its data at the construction site. You can reach Honeycomb 24/7 from any location, using your tablet, smartphone or laptop.

- Wireless data transfer
- Alert configuration
- Remote SWARM configuration
- Multi user
- Customisable reports
- Automatically generated reports
- User friendly

Sound Level Monitoring

With SWARM Sound, monitoring sound becomes much easier. Its smart and compact design makes physical installation very easy. This, combined with the much acclaimed Honeycomb dashboard, you will discover that you can start your project without any hassle.

- Installation takes only a few minutes.
- Remote configuration.
- Receive alerts via text message and/or emails.
- Create comments on data and exceedances.

Basetime
PRECISION MONITORING

Basetime Locator One

An autonomous GNSS-based monitoring system with subcentimetre precision, and time as a fourth dimension.

The Locator One is a device engineered to autonomously monitor your embankment, structure or landform. For embankments, by placing a fleet of devices on settlement rods, observations are collected resulting in high accurate data delivered to the Basetime dashboard or a preferred information system.

The Locator One uses GNSS and RADAR sensors to monitor and present both the vertical movement of the original ground level and the height and thickness of the added layers. The GNSS sensor measures the exact position of the top of a settlement rod with the precision of – at most – 4.5mm in the Z direction and 3mm in the X-Y direction.

TOPCON

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Topcon Delta Watch

Delta Watch software provides a modular solution to monitor, manage and evaluate automatic and/or manual monitoring data as well as optionally trigger alarms. Data from robotic total stations, GNSS receivers, leveling devices, and a variety of geotechnical and structural sensors can be processed and analysed individually or as a network-adjusted solution.

As standalone software, Delta Watch delivers accurate and reliable data in a variety of reporting formats to best fit a project's needs. Alternatively, Delta Watch can feed processed data to third-party visualisation software to provide system integration capability in large monitoring projects.

Topcon Delta Log

Accessed via a secure web portal, Delta Log provides an intuitive interface to manage observations, target types, and measurement scheduling.

Topcon Delta Link

Delta Link provides hardware support for autonomous operation in the field. Communications options include Ethernet, Wi-Fi, and a globally approved integrated cellular modem (data SIM provided by third-parties). A 110/240 VAC standard power supply with an external battery backup allows operation during short power outages. An external battery and solar panel can also be used when main power is not available. Delta Link manages each power source, maximising system availability.

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SOLUTION READY

aptella.com | 1300 867 266

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