

CIVIL CONSTRUCTION SOLUTIONS

Aptella
AUTOMATION +
POSITIONING TECH

Why Aptella

We're there when you need us

With more than 30 years' experience in the civil construction industry, Aptella and its founding businesses have continuously broken new ground in the application of positioning and machine control technology to enable safer, more efficient and more productive construction methodology.

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.

How We Work

UNDERSTAND

We enhance with knowledge.

We are tapped into the technology market and our customers' businesses, harnessing our diverse expertise to build tailored solutions from inside the industry.

INNOVATE

We are seeking the new.

We source the latest technology from around the world, leading our customers with innovative solutions tailored to their needs.

PARTNER

We will support for the long-term.

We are the trusted technology partner, helping to drive efficiencies and ensure return on investment for every customer.

Where We Work

We operate throughout Australia, New Zealand and Southeast Asia

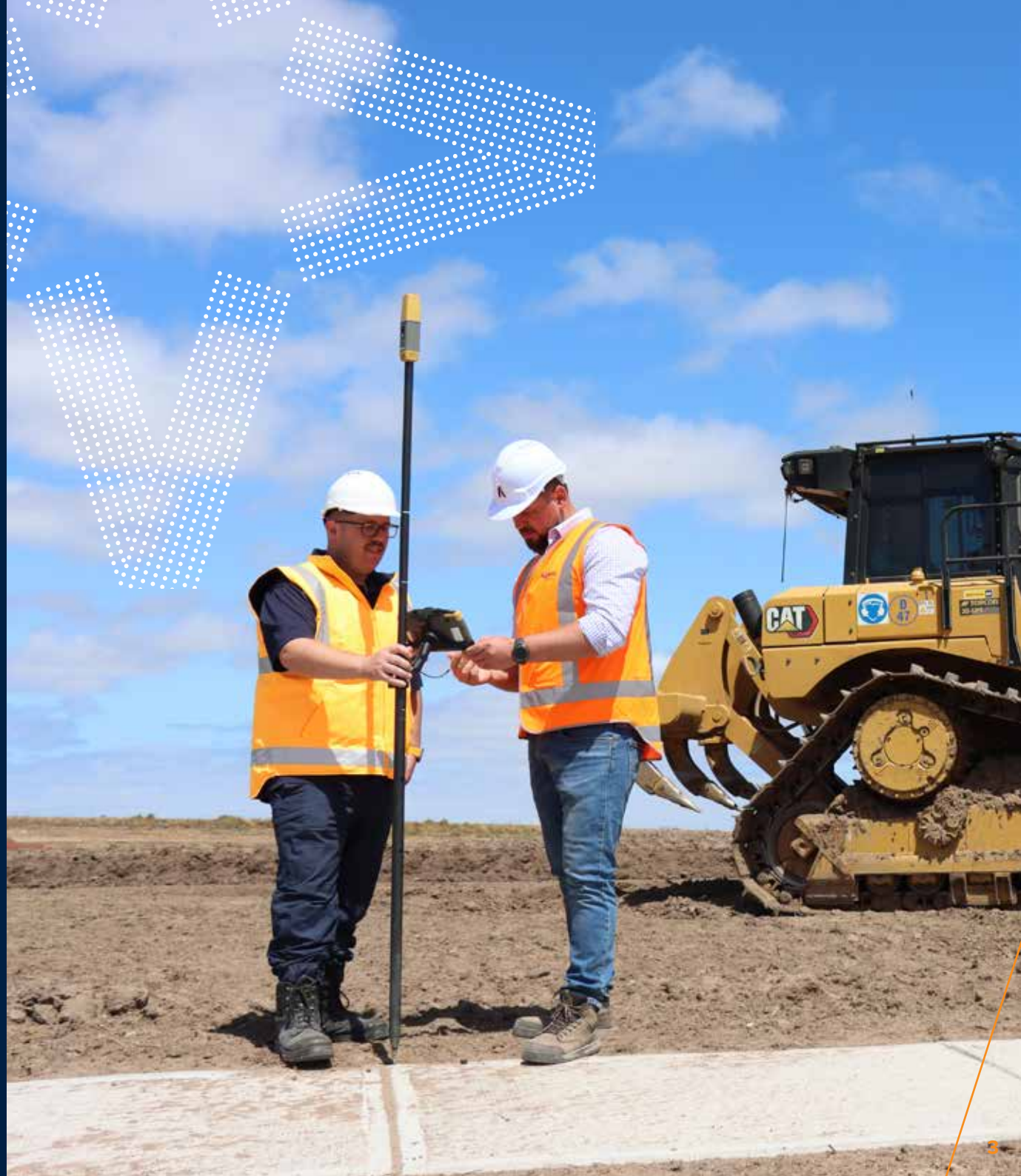
- Melbourne
- Sydney
- Perth
- Brisbane
- Canberra
- Adelaide
- Darwin
- Townsville
- Rockhampton
- Coffs Harbour
- Hobart
- Launceston

New Zealand

- Auckland
- Christchurch
- Hamilton
- Wellington

Southeast Asia

- Jakarta
- Singapore
- Manila
- Kuala Lumpur





Manage Everyone Working To A Design From A Single Interface

Tokara is the gateway to every machine and survey asset in the field

For all machines & survey assets

Tokara lets you send and receive files from most leading positioning technology brands and machine makes

Project-wide and fleet wide

Whether you're managing multiple assets on a single project, or a fleet across multiple projects

Fast support a phone call away

Remote support for Topcon positioning systems, plus view and connect with other branded systems

Remote Access & Support

Tokara lets you remotely access the screens of your machine control and survey instruments with a single click



Access Topcon and other factory or aftermarket devices remotely

Send & receive messages to operators, surveyors & managers.

Tokara Support Plans

To ensure that your machine control and survey equipment is always performing at its best, the team at Aptella is here to support you. Our highly trained specialist technicians are committed to providing the highest quality of service, with Tokara support hubs dedicated to ensuring requests are quickly actioned to maximise your machine uptime.

Our comprehensive plans combine the benefits of Tokara with access to our technical experts, to give contractors and project managers peace of mind that technical assistance, operator training and remote updates are available as needed, reducing the need for on-site visits.



Manage design files across all devices from a single portal

Tokara Office is designed for surveyors, contractors and managers to proactively control the design file management process across a fleet of machines and rovers.

Whether you're working on one site or managing your fleet across several projects, Tokara helps you to ensure everyone is working to the correct design file.



One to mant file transfers, multi-brand

Instantly send design updates to all machines and supported survey rovers, including mixed brands of machines & positioning technology

File transfer history by machine, device or group

View what files were sent with the date and time sent as well as the date and time downloaded

Colour coded file status for proactive management

View when an operator has downloaded and is working to the latest design, or if it has been sent and not downloaded

Version control and recovery

View when an operator has downloaded and is working to the latest design, or if it has been sent and not downloaded

Your World On a Map

View and access critical information at a glance

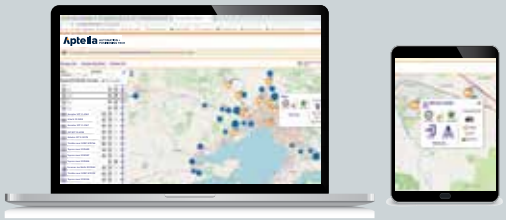
View the machine or device type, online status, connection strength and last known location (updated every 10 minutes) and more

Interactive map to create group or measure

Draw the boundary of a project to create a new geofenced file group. Use the ruler feature to measure distance between CORS GNSS bases and devices

LIve filters to get the data you need

Filter your assets by status, file group, serial numbers, name or any other parameters you use to organise your assets and check their status



Visualise your design and identify black spots

Tokara enables you to overlay KML files and drone imagery on the map, giving you a design reference for where assets are working. UHF and cellular signal strength overlays alert you to any black spots on site.



Additional info & reporting

Machine calibration files or build files

View both current and historical machine calibration or build files. Restore previous builds using backed up data.

Current Network RTK session info

View the connection information to CORS Network including login details and the base station connection

Create serialised hardware reports

Report on your trackable machine control and survey components via serial number, name, or custom parameters

Reporting your way

Setup scheduled GNSS usage reports with the option for detailed summary, weekly summary or yearly summary.

Online status alerts

Set up Tokara to email alerts when machines and devices are next online.



Network GNSS Solutions

AllDayRTK records and distributes GNSS position correction information using a network of Continuously Operating Reference Stations (CORS). AllDayRTK is purpose-built to meet the rigour and quality required for the demanding tasks of all geospatial applications and civil infrastructure projects across Australia and New Zealand.

Reliability

- Australia + New Zealand's most reliable Network RTK solution
- Secure, accurate, repeatable positioning
- Positioning infrastructure consulting services for project sites

Innovation

- Consultancy + Research projects for automation using GNSS infrastructure networks
- Senior management contribution to Australian Space Agency
- Partnered with world leading positioning innovators



Nationwide

AllDayRTK
AllDayRTK **PLUS**
AllDayRTK **RINEX**

Projects

AllDayRTK **SITE**
AllDayRTK **FOCUS**

MiRTK

MiRTK provides internet enabled correction services to rover devices, replacing the need for UHF radios.



Our Services

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.

Consulting Services

We offer a diverse range of consulting services, from setting up and managing your site's GNSS correction network, paving and resurfacing, managed reporting services and more. With a proven track record

Rental 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.

On-Site Service

At Aptella, we understand that even the most robust equipment needs maintenance and technical support. When it does, trained field service engineers are on-hand to provide corrective action and advice for minimum downtime.

No other supplier can match the breadth and depth of our on-site technical know-how. Regional support hubs at remote locations in Queensland and Western Australia have been established in response to major infrastructure and mine projects.

All field service engineers are trained by product manufacturers to give unrivalled technical expertise. We provide flexible Support Level Agreements (SLAs) that cover on-site installation and deployment, calibration, network interfacing, maintenance and repairs, plus remote diagnostic capabilities with Tokara.

When an installation or technical specialist from our team arrives on site, customers can be assured that all on-site safety regulations and procedures will be followed.



Aptella ACADEMY

Academy Training Courses

Our expert trainers are here to help you get productive immediately. Enable your team to take control of your projects by empowering your people with the know-how to use technology to their best advantage.

Our training is application specific and tailored to your industry, providing the perfect foundations to tackle any task or project.

We believe in learning by doing, with Academy courses that balance theory with practical, hands-on training that is relevant to real-world scenarios and applications.

- On-site training courses
- Classroom learning at Aptella offices
- Classroom learning at customer offices
- eLearning on-demand courses
- Academy Accreditation for successful course completion

Topcon Lasers & Levels

Construction Laser

Topcon RL-H5A/B

The RL-H5A/B is the self levelling, accurate, reliable, multi-purpose construction laser produced by Topcon Laser is accurate and reliable long-range, multi-purpose construction laser level. Ideal for a broad scope of applications such as grading, drainage, site set-up, excavation, drainage, concreting, earthworks and general construction, the Topcon RL-H5A/B laser is incredibly versatile.

- Long-range operation (800m)
- Simple, intuitive manual slope capability
- Tough IP66 construction rating
- Automatic height of instrument alert (elevation alert)
- Topcon tough design with 5-year warranty and unparalleled accuracy



Grade Lasers

Topcon RL-HV Series & RL-200

Get to grade accurately and efficiently with the Topcon RL-HV1S single grade laser level. Designed for all manner of horizontal, vertical or single slope levelling tasks, the new HV series is a great option for earthmoving contractors, builders, concreters and other building trades.

Get a laser level that is up to every job with the Topcon RL-HV2S dual grade tool. Packed with features and Topcon's signature precision and reliability, the new HV series won't let you down. Ideally suited to more complex earthmoving and levelling tasks.

As one of the most advanced rotating lasers, slope lasers assist in calculating the exact angle of a slope. The RL-200 Series provides slope lasers that can be used over long distances, giving accurate slope measurements.



Pipe Lasers

Topcon TP-L6 Series

Topcon's TP-L6 Series Pipe Lasers offer a combination of features and technology that are proven to meet the demands of contractors more than any other alignment lasers on the market. With a new compact design the Topcon TP-L6 can be used in even the tightest of pits. Available in economical red beam or high visibility green beam, the new Topcon pipe lasers come with better than ever battery life to keep you working.

- -15% to +40% grade capability to suit every job
- Self levelling so you know you are working accurately
- Left/right beam line control
- High-contrast easy-to-read display panel
- Increased beam clarity & brightness available in red or green beam
- Topcon tough design with 5-year warranty and unparalleled accuracy



Digital Level

Topcon DL-501 Series

The DL-501 Series incorporates an array of advanced technologies to achieve the highest levelling 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, RemoteTrigger prevents accidental jolts, and Auto Focus (DL-501Advanced 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 Measurement
- 20Lxc Minimum Brightness
- Dual Axis Tile Sensor
- Line Level Program
- 10,000 Points Internal Program
- SD/SDHC card & USB port



Auto Level

Topcon AT-B Series

Utilising a finely tuned magnetic damping system, AT-B Series automatic levels quickly level and stabilise the line of sight. These precision instruments ensure reliable levelling even when working near heavy equipment or busy roads where fine vibrations could be present.

- Choice of 3 models – 32x, 28x and 24x magnifications
- Rapid, accurate and stable automatic compensation
- Ultra-short 20 cm focussing
- All-weather dependable
- Clampless, endless fine horizontal adjustments



Topcon Machine Receivers

The LS-B Series of machine-mounted laser sensors are affordable grade indicate systems designed to improve grading and excavating production and accuracy.

Easy to use with fast setup, these depth control sensors can be mounted to your earthmoving machines in minutes. Attach any of the LS sensors to a piece of equipment, turn it on, bench in, and go to work. No more waiting for a grade checker or jumping off a machine to check your own grade.



iMEX Lasers

Z99R

Rotating Laser

The iMEX Z99R 18V Dual-grade laser level is built tough for the professional contractor. Rugged, accurate and operational from your phone! Designed for a wide variety of applications, it can be used for horizontal, sloping and vertical laser applications.Self levelling

- Working range 800m
- Dual grade ±10%
- Accuracy ±1.5mm @ 30m
- iMEX 18V LiHD battery platform



i66R

Rotating Laser

The class leader in economical lasers, the iMEX i66R is the best laser for everyday general levelling. Features a digital mm reading detector and a one button function for quick and easy set-up, lithium-ion battery for long run time and robust fully enclosed laser diode for excellent results for a variety of trades.

- Self levelling
- 400m diameter range
- 600 rpm rotation speeds
- LRX6 German made mm reading detector
- Out of level warning light



i77R

Rotating Laser

The iMEX i77R is the robust all rounder for general levelling. Designed specifically for groundworkers, concretors, landscapers and general building professionals it has a huge 600m diameter range and a 5° slope mode combined with a 90mm pick-up mm reading digital detector.

- Self levelling
- 600m diameter range
- Manual slope mode to 5° (9%)
- LRX10 German made mm
- reading detector
- Out of level warning light



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i88G/R

Rotating Laser

The i88G is the most versatile and feature packed rotary laser in the iMEX range. With manual dual slope and available in red or green beam to suit both indoor and outdoor use.

- Self levelling
- 600m diameter range
- Manual slope mode to 5° (9%)
- 4 rotation speeds
- LRX10 German made mm
- reading detector



3D-MC Edge

Indicate 3D Machine Control

Designed for blade-driven machines including scrapers, compactors and dozers, 3D-MC Edge offers a cost-effective, high-accuracy GNSS system.

- Reduce fuel waste and machine wear by getting to grade without undercutting or overfilling
- Responsive, smooth, performance utilising Topcon's latest MC-X platform components and advanced 3D-MC software
- Compatible with all makes and models







MC-X Platform

Topcon offers versatile machine control options in 2D positioning that can be quickly upgraded to 3D where your project requires it.

Topcon MC-Mobile is designed for excavators and compact track loaders as a complete design, measure and build solution.

Topcon MC-Max is for civil earthworks, with multiple configurations to suit the machine and job.



Additional Elevation Control

Simple, effective, guidance

Enhance productivity with 2D elevation control, ideal for fast grade checking, tight tolerance work and slopes.

- sonic trackers
- Laser receivers
- Tracker jacks

Topcon's LS-B series of machine-mounted laser sensors are affordable grade indicate systems designed to improve production and accuracy without relying on grade checkers or jumping in and out of the cab to check levels.



Mass Haul & Weighing

LX-100

on-board weighing solutions for excavators

This easy-to-use system gives operators accurate bucket weight information at their fingertips, to increase productivity and reduce machine wear.

With the ability to store data for accurate record keeping, traceability and stock management, LX-100 is a flexible solution that can be customised to suit a wide range of earthmoving applications, attachments and accomodate a variety of active jobs simultaneously.



LM-100

on-board weighing solutions for loaders

LM-100 has been designed to operate within the fastest loading environments and toughest of conditions compensating for uneven, sloped ground and restricted loading areas reducing cycle times and maximising tons per hour performance.

Loading correctly first time eradicates return trips to the stockpile reducing vehicle movement, fuel usage and machine and tyre wear. Plus, you can opt for a Trade verison that enables you to transact from your weight figures.





Haul Truck Management

Available on Android and iOS devices, Topcon's Haul Truck app eliminates paper-based reporting to streamline haul operations. With the ability to monitor equipment, location and activity in real time, managers can quickly identify inefficiencies and ensure loads are collected and offloaded where they should be. Drivers have an easy to use, hands free view of their routes with colour-coded load and dump regions, haul counts and more.

Topcon Haul App

Hardware-free digital records of load and dump cycles to increase productivity, save time and save money.

- Cost effective: no hardware required, drivers simply download the Topcon Haul app on their iPhone or Android device
- Accurate records: app tracks hauls, load and dump metrics
- Time savings: App automatically finds nearby sites and records delays to improve routing



Sitelink3D V2

Do more with your data and create customized reports from your desk. Sitelink3D™ gives you the ability to better manage your material in real time. Plan, schedule, define machine tasks, and run customized reports to satisfy DOT requirements.

- Increase productivity with live performance metrics: event-driven, real-time performance tracking on haul cycles with live statistics widgets
- Efficiently manage multiple jobs: create and manage multiple sites and projects, with defined user roles and access levels, as well as file and metadata management
- Keep an eye on progress: overlay design files, alignments and drone imagery to visualise the project in 2D or 3D. Track all connected machines



3D Machine Control Solutions

MC-Max



MC-Mobile



Software

3D-MC - Pocket3D






CAT




CAT
140H

Topcon MC-Mobile

Design, measure and build in one

Topcon has combined key technology from surveying and machine control to increase efficiencies, while reducing wait times and staffing needs for your small and mid-sized jobsite projects. MC-Mobile equips you with everything you need to perform layout and in-field design to build your jobs and to verify the results.

Displays and other components are designed to be easily shared across numerous machines in owned or rental fleet environments. These pieces can also be moved from grade checking/layout rover pole to machine and back

- GPS and LPS positioning technology compatible
- 3-year warranty on serialised components
- Fully compatible with Tokara remote access and support





MC-Mobile Solution For Excavator

- Supports swing booms
- Tilt bucket, tilting hitch and tilt-rotator support
- Hardwire + hire compatible
- Move from machine to pole for layout, grade check + topo



MC-Mobile for Compact Track Loaders

- Level Best grader/box blade, Sharpgrade blade and Landpride/Kubota box blade attachments fully supported for automatics
- Other attachment types indicate only support
- Hardwire + hire compatible
- Move from machine to pole for layout, grade checks + topo



MC-Max Excavator

GNSS – Auto and indicate icon

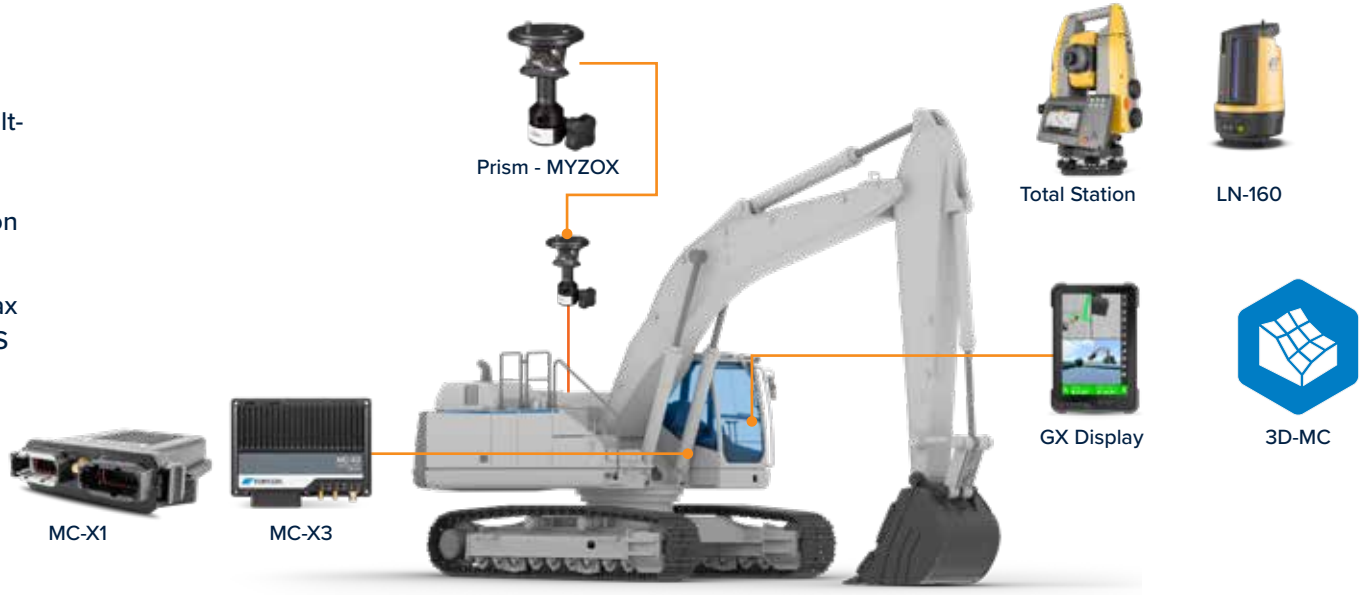
- Compact, safety-certified valve controller and joystick
- The UR-1 is a radio module to communicate via UHF/915 SS with local base stations and an internal cell modem to communicate with 4G networks.
- MC-Max excavator system utilises -TS-i4 sensors. TS-i4 sensors are IMUs that are not affected when starting, stopping or turning.
- The bright and robust GX-Series delivers a brand-new experience for modern machine control. The 3D-MC software on the GX-Series provides real-time position and project design information, with integrated grade indicator LEDs.

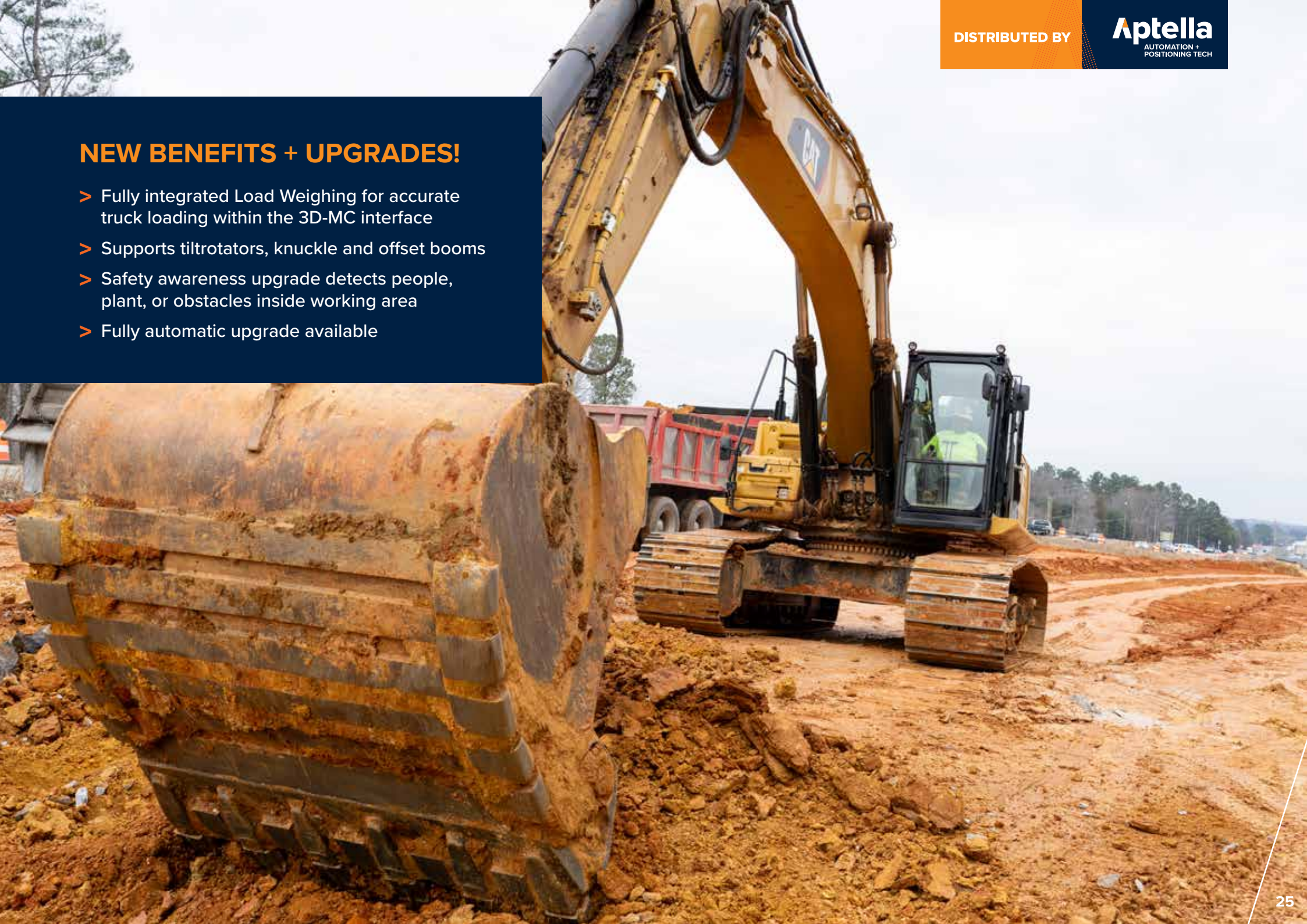


LPS

Use optical positioning for jobsites where there is limited open sky, such as under tree canopies, in built-up areas, under bridges or in tunnels.

- Robotic total station to identify the correct position of the machine on the jobsite
- Uses the same core components as other MC-Max solutions, making it flexible to swap between GPS and LPS positioning





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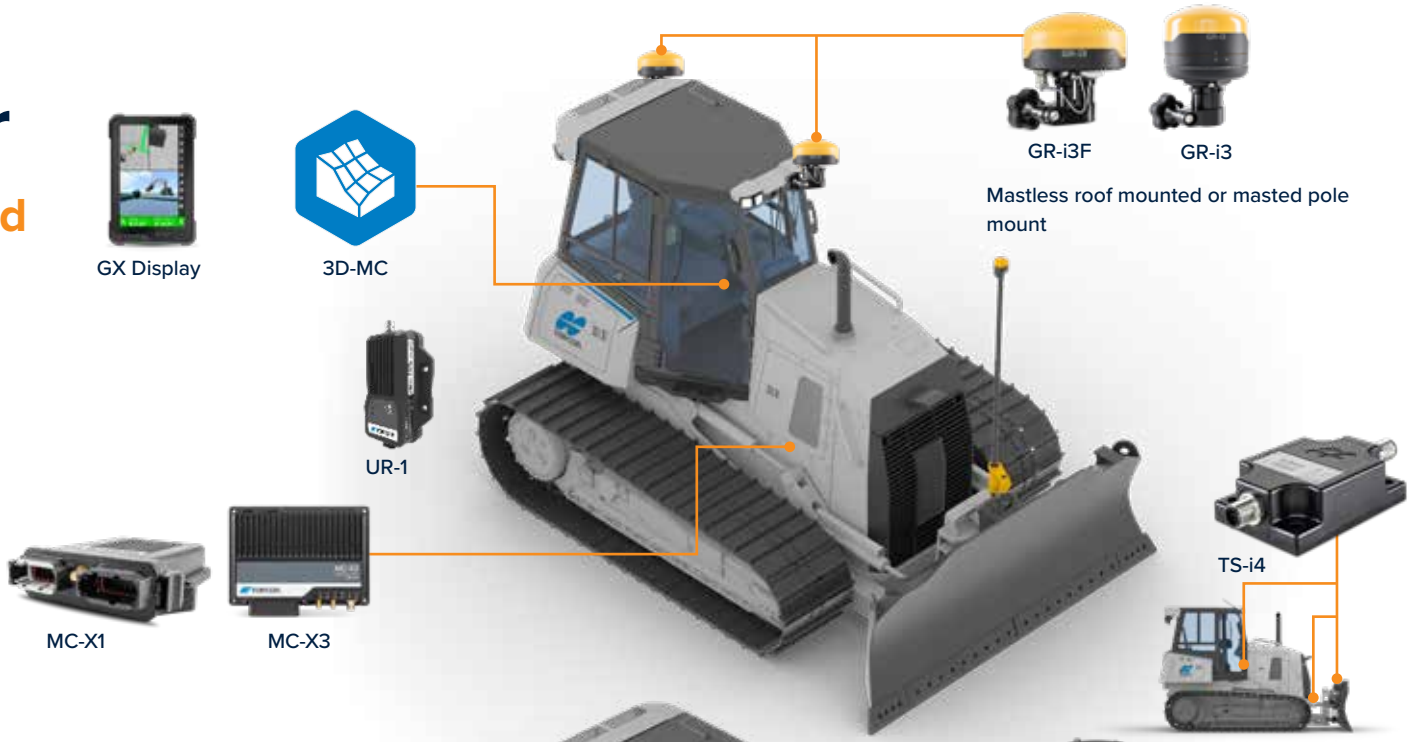
NEW BENEFITS + UPGRADES!

- Fully integrated Load Weighing for accurate truck loading within the 3D-MC interface
- Supports tiltrotators, knuckle and offset booms
- Safety awareness upgrade detects people, plant, or obstacles inside working area
- Fully automatic upgrade available

MC-Max Dozer

GNSS - mastless or masted

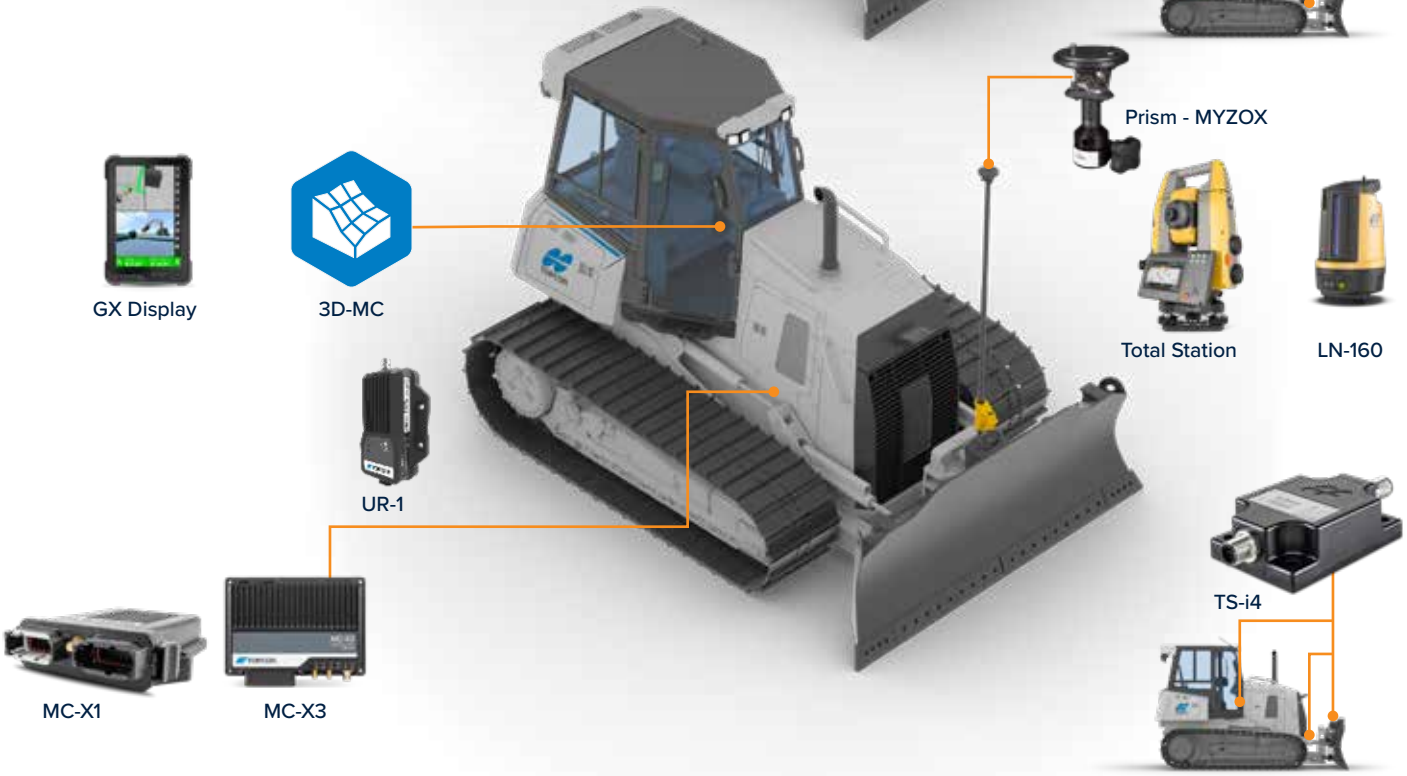
- Multiple constellation tracking for reliable GNSS fix and accurate positioning
- Hardwire and hire options available
- Full Tokara remote access and support available



LPS

Use optical positioning for jobsites where there is limited open sky, such as under tree canopies, in built-up areas, under bridges or in tunnels.

- Robotic total station to identify the correct position of the machine on the jobsite
- Uses the same core components as other MC-Max solutions, making it flexible to swap between GPS and LPS positioning



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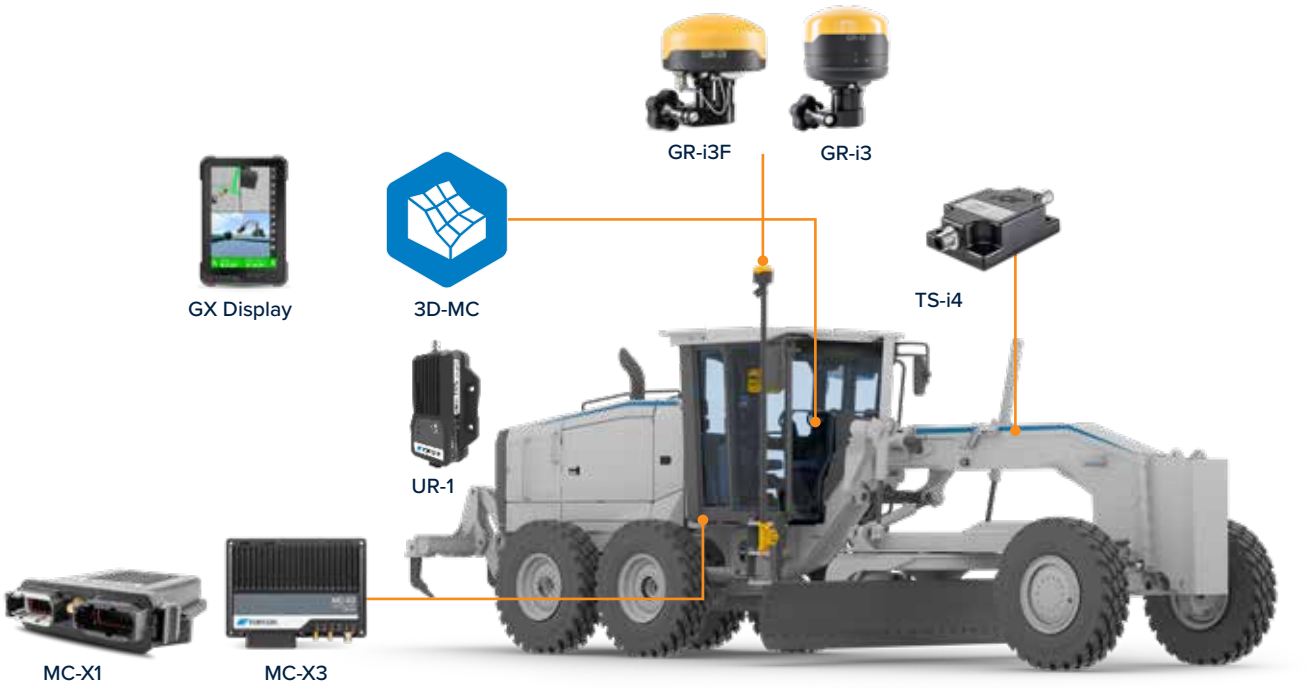
NOW AVAILABLE FOR WHEEL LOADERS!



MC-Max Grader

GNSS Single/Dual

- The bright and robust GX-Series delivers a brand-new experience for modern machine control. The 3D-MC software on the GX-Series provides real-time position and project design information, with integrated grade indicator LEDs.
- The masted GNSS configuration is available with the MC-X1 controller. Machine interface connection via CAN bus enables machine direction detection so that the direction of motion on the screen remains the same for single GNSS machines.
- MC-Max Grader system utilizes TS-i4 sensors. TS-i4 sensors are IMUs that are not affected when starting, stopping or turning.



Millimetre GPS

- The Millimetre GPS solution is configurable with the vibration mount, PZS-i3 and GR-i3 on the mast.
- The bright and robust GX-Series delivers a brand-new experience for modern machine control. The 3D-MC software on the GX-Series provides real-time position and project design information, with integrated grade indicator LEDs.



LPS

- The A7R prism is available for LPS-only machines.
- The 3D LPS solution can be easily configured for GNSS. The A7R can be removed and replaced with the GR-i3F on the mast.
- Additionally, the RP-i3 prism can be replaced with the GR-i3 for GNSS capability.
- 2D components may be used in conjunction with LPS machine files and configurations. Additionally, the 2D sensors may be used without 3D elevation sensors for 2D-only applications.
- Robotic total station to identify the correct position of the machine on the jobsite
- LN-160 Layout Navigator to identify the correct position of the machine on the jobsite
- The MC-X1 controller extends the functionality of the MC-X1 with an UHF/915 SS internal radio module to communicate with local base stations and an internal cell modem to communicate with 4G networks.
- The bright and robust GX-Series delivers a brand-new experience for modern machine control. The 3D-MC software on the GX-Series provides real-time position and project design information, with integrated grade indicator LEDs



Paving

Relative or Absolute?

Is there a pre-defined design?
Tied to project control and elevation?
Incentive on elevation tolerance?
Incentive for meeting the design criteria?
Yes? Then mmGPS or LPS is the answer

Relative to the existing surface?
Incentive based on smoothness?
Incentive based on material quantities?
Looking to correct cross slopes?
Yes? Then 2D or SmoothRide is the answer



3D Paving – mmGPS or LPS

Free your paving from the confines of stringlines and other linear references and move production to the fast lane.

Advantages:

- High accuracy grade reference covers your entire project – eliminating stringline
- mm-GPS provides precise vertical data to multiple machines and surveyors
- Handover with transmitters or total stations for a larger workable area
- Pave complex transitions, even through horizontal and vertical curves
- Share components with other Topcon 2D and 3D machine control systems



2D Paving/Smoothride

Advantages:

- Variable control to suit real world conditions
- Collecting data safely
- Differential compaction calculations
- Saves on materials
- 100% coverage of work area

Intelligent Compaction

- 100% coverage of work area - know you've covered the whole road
- Identify weak zones in road - save rework down the track
- Add accelerometer & temperature sensor to common Topcon components
- Reporting - compaction, temperature, pass count etc



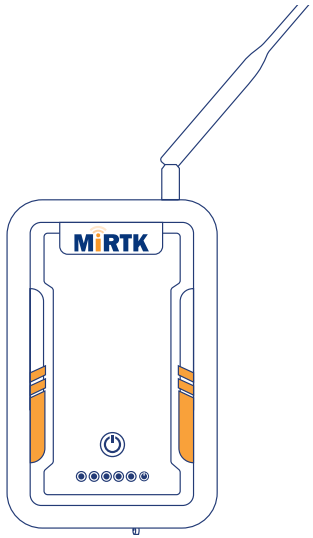


MiRTK

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

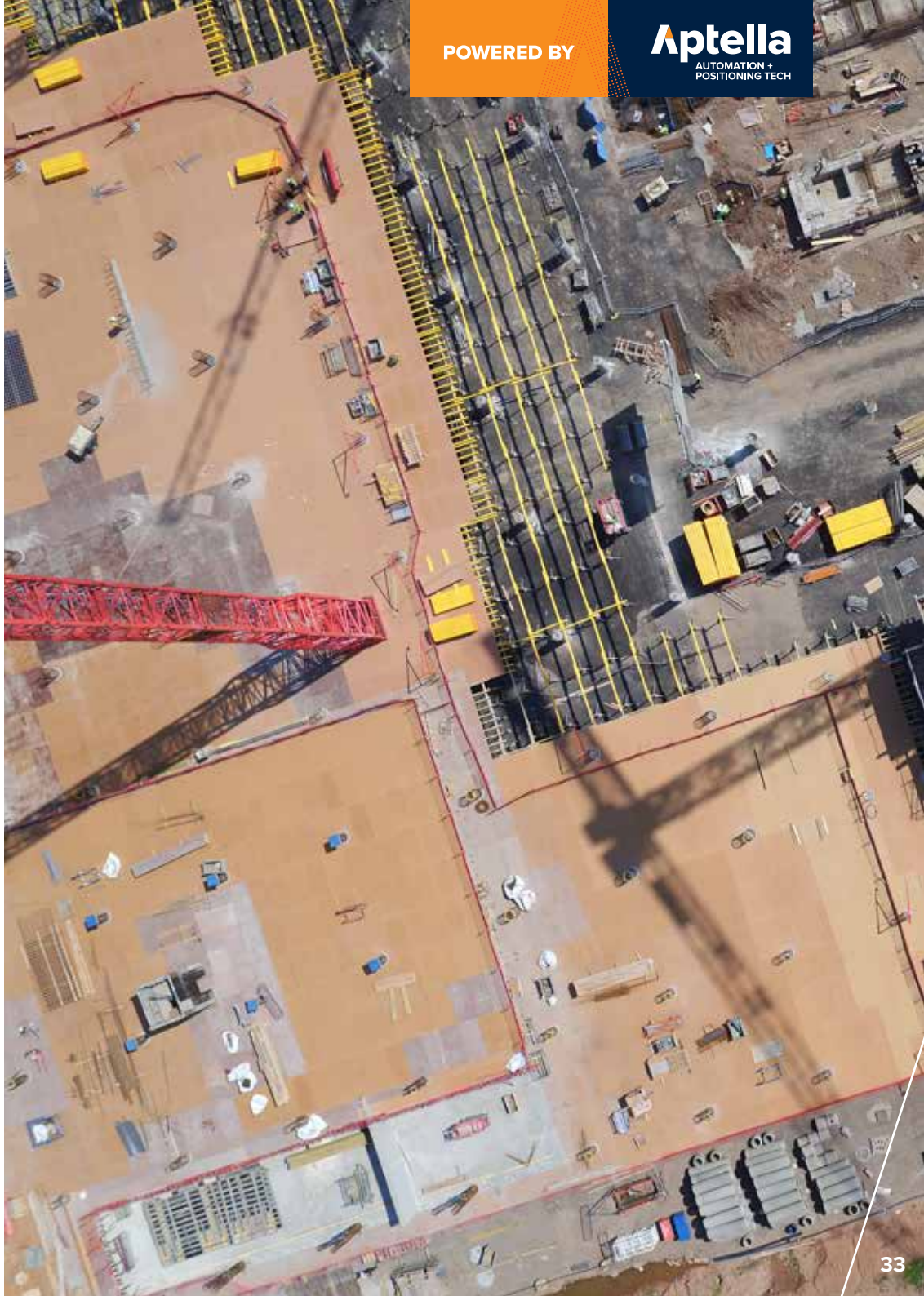
AllDayRTK Plug-n-Play Kit

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



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.

TOPCON

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®



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



UHF or 915+ Configuration

NET-G5

GNSS Reference Receiver

Born to perform within a reference station network. If there is a naviga-tional 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.



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



UHF or 915+ Configuration

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



Supervisor Kit

A rugged, reliable supervisor kit to quickly and easily check as-builts and manage projects within your vehicle or on the rover pole.

- Roof rack or bullbar vehicle mount options
- In-car display mounts on the windscreen, DIN slot or floor pole
- Pocket3D on-board software
- Android CTX8X2 field tablet
- Compact, lightweight HiPer CR or Sokkia GCX3 GNSS receiver



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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

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



SOKKIA

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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.



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.



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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Ground Penetrating Radar (GPR)

LMX100 (GPR)

Our Sensors & Software LMX100™ completes the locator's toolbox, offering a more complete picture of the underground infrastructure. With a simple, easy-to-use interface it also offers the perfect balance of depth penetration and high resolution for accurate locating.

- Metallic and non-metallic utilities
- Utilities with broken tracer wires
- Undocumented utilities
- Trenches and disturbed soil often associated with utility burial
- Unexpected obstacles or buried structures such as old foundations that can cause problems for excavations or construction



LMX150 (GPR)

LMX150™ FINDAR® GPR complements traditional pipe and cable locators and allows you to locate targets below the surface such as:

- Metal utilities, including pipes and cables
- Non-metallic pipes, including PVC and asbestos cement
- Concrete storm and sewer systems
- Utilities where installed tracer wiring has failed
- Underground storage tanks and drainage tiles
- Septic system components
- Fiber optic cables
- Non-utility structures such as vaults, foundation walls and concrete pads



LMX200 (GPR)

The LMX200™ provides unprecedented insights and target confidence to detect traditionally non-locatable subsurface features such as:

- Non-metallic pipes, including PVC and asbestos cement
- Underground Electrical Cable
- Concrete storm and sewer systems
- Utilities where installed tracer wiring has failed
- Underground storage tanks and drainage tiles
- Septic system components
- Non-utility structures such as vaults, foundation walls and concrete pads



Noggin (GPR)

If you need a high-performance, configurable GPR that is adaptable for multiple applications, the NOGGIN is the right choice for you.

The NOGGIN has sensors ranging from 1000 MHz to 100 MHz. Simply choose the sensor that provides the depth penetration and resolution best suited for your application. Noggins can be used for high resolution surveys of concrete buildings and structures, bridge decks, pavement, runways and underground mines. Moderate depth surveys for subsurface utility mapping, underground storage tank detection, archaeology, forensics and unexploded ordnance. And for even greater depth to map geologic structure, measure depth to bedrock, glacier profiling and geotechnical surveys.



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

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.



XGRIDS

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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.



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

- Eliminating time on or near track /construction
- Easy to install, set-up and use
- Wireless and independently powered for FlatMesh systems

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

- Only use high precision, stable sensors
- 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.

- Innovate and collaborate closely with / for clients
- 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







OMNIDOTS

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 webplatform
Honeycomb is Omnidots’ cloud-based web platform that provides access toyour 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



Dust Monitoring

Omnidots’ dust monitor is a robust industrial particulate matter (PM) sensor ready to be used in the roughest environments. It is designed specifically for construction and infrastructure projects. Ensure the health and safety of on-site personnel and nearby communities.



Basetime Locator One

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

Locator One is a device engineered to autonomously monitor your construction grounds. By placing a fleet of devices at settlement rods, deformation observations are collected resulting in high accurate data delivered to the Basetime dashboard or a preferred information system.

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 sand layer. The automated sensor measures the exact position of the top of a settlement rod with the precision of – at most – 5mm in the Z direction and 3mm in the X-Y direction.



Intelligent Safety

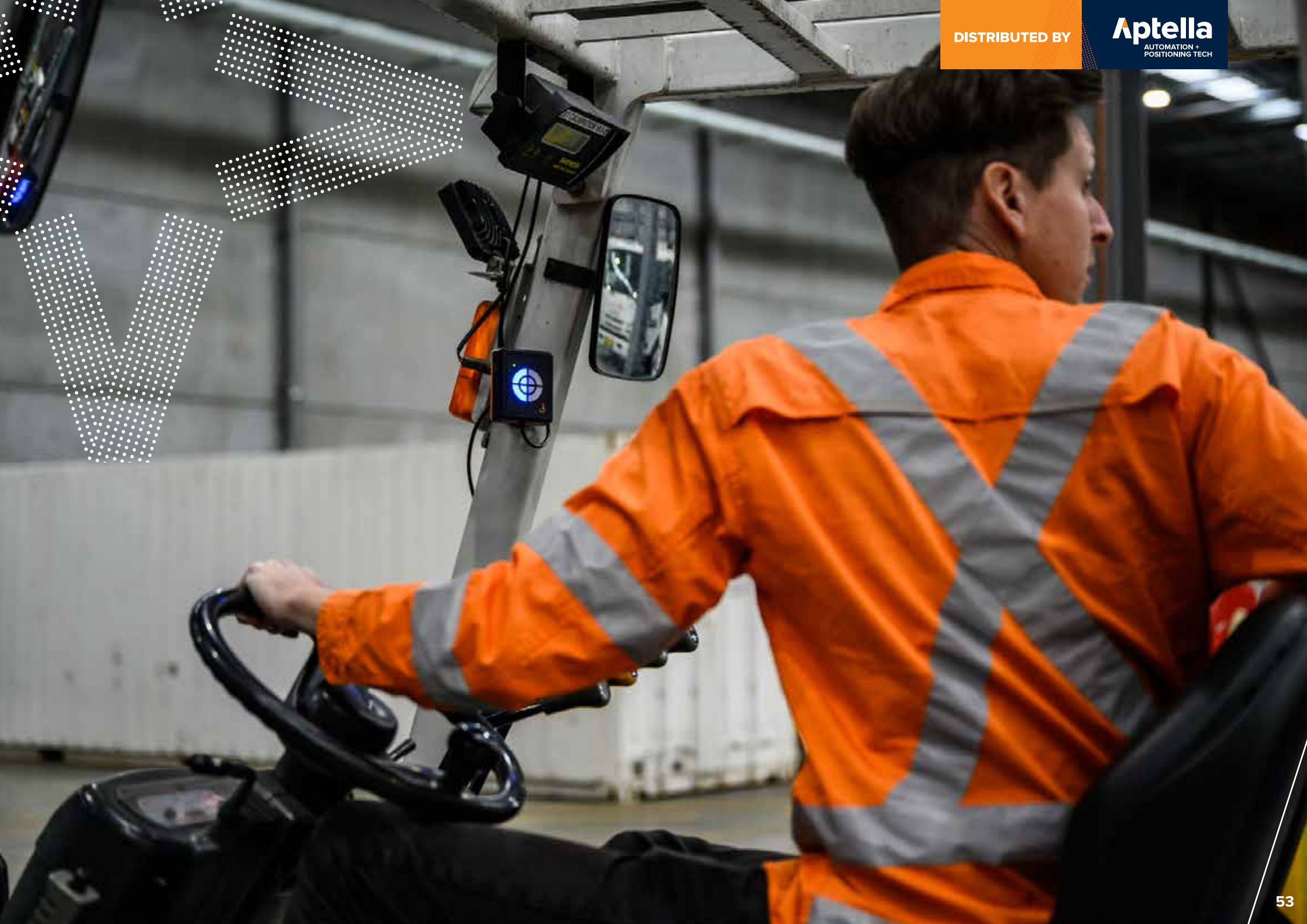
Blindsight is a complete safety solution for the most dynamic industrial environments. Built on industry-leading AI vision, Blindsight detects, alerts and informs your team on high-risk interactions that matter most. From operator alerts and data for your daily toolbox reporting to worksite safety benchmarking, Blindsight allows your team to course-correct behaviours swiftly.

- Automatic detection of people to protect workers in dynamic environments without the need for tags
- Real-time reporting and safety index benchmarks to measure your workplace safety metrics
- Video capture of each trigger event to give managers powerful insights into site safety behaviours
- Configurable to your site and workplace health and safety processes and procedures









Professional Aerial Survey Tools

Position Partners 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.



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