



BUILDING CONSTRUCTION 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 enable safer, more efficient and more productive construction sites.

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.



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.



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.





All our know-how, in your back pocket

Tokara is a remote access service designed and developed by Aptella to give our customers unparalleled support and training in the field.

Support is only a phone call away

Everyone needs a bit of help now and then, and at Aptella we understand that when the pressure's dialling up on site, you don't have time to wait!

Tokara taps you into our nationwide support team in Australia, who have years of experience with this technology (quite a few have surveying degrees too).

We see what you see

Tokara enables us to remotely login to your field tablet so you don't have to explain what you're seeing. Our technicians can view your screen, update settings, provide training and troubleshoot technical problems to get you back up and working as quickly as possible.



**Building Construction
Support & Resources**



Manage designs on multiple devices from your computer.



Fast support from our expert team.



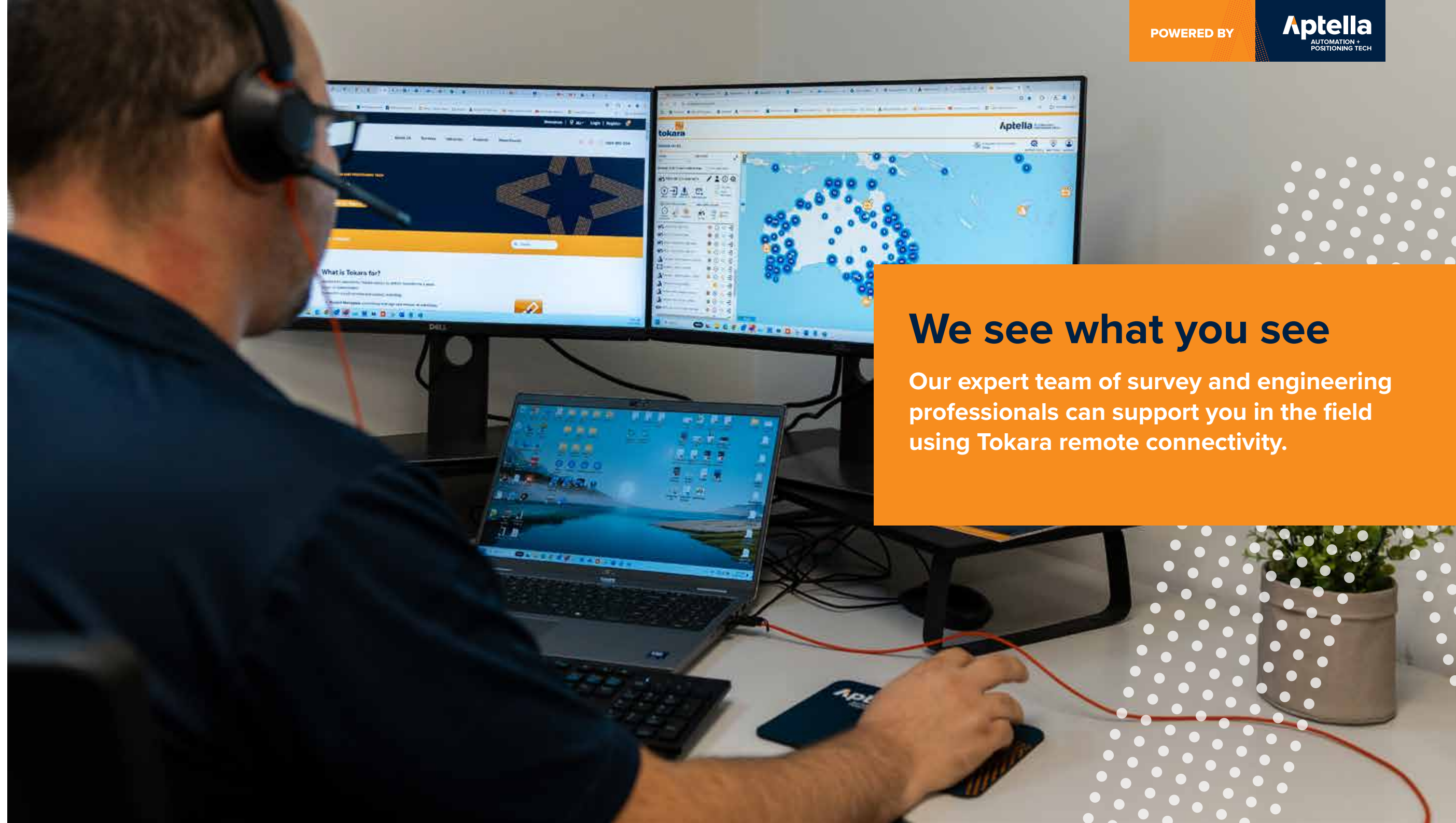
Tips and training on the job site.

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We see what you see

Our expert team of survey and engineering professionals can support you in the field using Tokara remote connectivity.

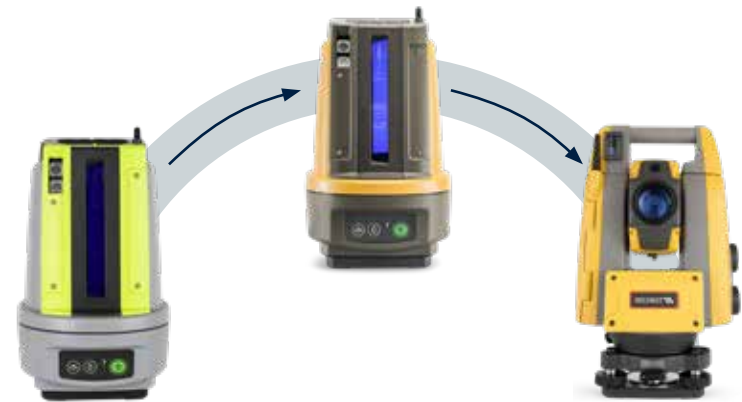


Topcon Set Out Solutions

Topcon offers layout solutions designed to meet the needs of construction professionals at every level. This guide highlights the features, benefits, and operational tips for Topcon's LN-50, LN-160, and GT Series total stations. These tools are tailored to support a wide range of construction and layout tasks, providing reliable results for every phase of your project. Whether you're new to digital construction tools or a seasoned expert, Topcon has the perfect solution to help you succeed.

As a company with more than 30 years' experience with positioning and survey technology, Aptella will ensure your team has the training and support to get the most from your Topcon set out system.

Your digital layout journey starts here



Learn more about Building Construction

Ideal for all building trades

Builders

Specific set out tasks? QA reports? Pre-pour formwork checks? Keep the project progressing on-time and to-design from in-ground works, through to completion and digital as-con reporting. Ideal for:

- > Residential
- > Commercial
- > Industrial
- > Multi-storey

Concreters & Formwork

Millimetres matter when setting out for the concrete pour! Do pre-pour checks to guarantee horizontal and vertical position to reduce rework. Set out accurately in 3D without stringlines:

- > Pad footings
- > Slab edges
- > Formwork decks
- > Step downs
- > Hobs
- > Plus any other element of your design!

Plumbers

For in ground, complete deck work and penetration set out without profiles, stringlines or tape measures! Single person set-out for:

- > As-con pick ups before backfilling
- > Digital record of in-ground asset position
- > Positional pipe laying
- > Grade checks

Electricians

From large sub-division installation, commercial/industrial builds through to high rise deck work, both set out and as-con work are extremely important for the electrical trades.

- > Prove work was completed to design with digital records of in-ground assets
- > Land penetrations in the wall while setting out on an empty deck

Software Solutions

Topcon Digital Layout

Topcon Digital Layout Software puts you in control of your construction projects like never before. Designed for users with no prior surveying experience yet requiring precision and efficiency, this cutting-edge software connects design to the job site, streamlining layout tasks to be faster, easier, and highly accurate.



Topcon Field

Topcon Field Software is the ultimate tool for construction and survey professionals who demand efficiency and precision. From the office to the field, Topcon Field simplifies data collection, layout, and stakeout, ensuring every step of your project is accurate, connected, and productive.



Topcon LN-50

3D Construction Laser

The Topcon LN-50 is your gateway to modern layout technology. It revolutionises entry-level layout by providing an affordable, easy-to-use total station for contractors and builders transitioning to digital workflows.

- > Range of 50m
- > Lightweight, extremely user-friendly and intuitive
- > More affordable layout solution
- > Easy one-button, self-levelling set up
- > Designed for use by non-surveyors
- > Topcon Digital Layout software designed specifically for building construction

Construction layout software

- > Step-by-step guide to streamline routines and avoid missteps
- > Compatible with industry-standard CAD files
- > Create PDF reports to summarize work progress and productivity
- > Support for Windows and Android



Learn more



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Topcon LN-160

3D Setout Instrument

The world's first 3D positioning system designed specifically for construction setout. The LN-160 builds on the foundation of the LN-50, introducing greater versatility by offering a range of 130m, and the option of using Topcon Field Software.

The Topcon LN-160 is a versatile, self-leveling construction tool designed to make layout fast, accurate, and effortless. Combining advanced technology with an intuitive design, the LN-160 bridges the gap between manual tools and sophisticated digital systems. Whether you're working on framing, utilities, or interior fit-outs, the LN-160 delivers the precision you need in a lightweight, portable package. Effortless to use and built for accuracy, it's the ideal solution for small to mid-scale projects.

- > Range of 130m
- > MC-Mobile compatible
- > Lightweight, extremely user-friendly and intuitive
- > Easy one-button, self-levelling set up
- > Works with Topcon Field and Topcon Digital Layout software

[Learn more](#)

Topcon GT-605v

Robotic Total Station

The Topcon GT Series represents the pinnacle of robotic total station technology, delivering unparalleled accuracy, speed, and reliability for the most demanding projects.

The flagship GT Series is equipped with advanced prism tracking, hybrid positioning, and rugged durability, and is designed to excel in dynamic environments. From large-scale infrastructure to high-stakes surveying tasks, the GT Series ensures maximum productivity and precision, empowering professionals to tackle any challenge with confidence. Engineered for excellence, it's the ultimate tool for cutting-edge construction and surveying.

- > Range of 600m plus
- > Full reflectorless capability
- > Flagship Topcon total station
- > Hybrid positioning
- > Works with Topcon Field and Topcon Digital Layout software



Learn more



Topcon HiPer CR

Site Receiver

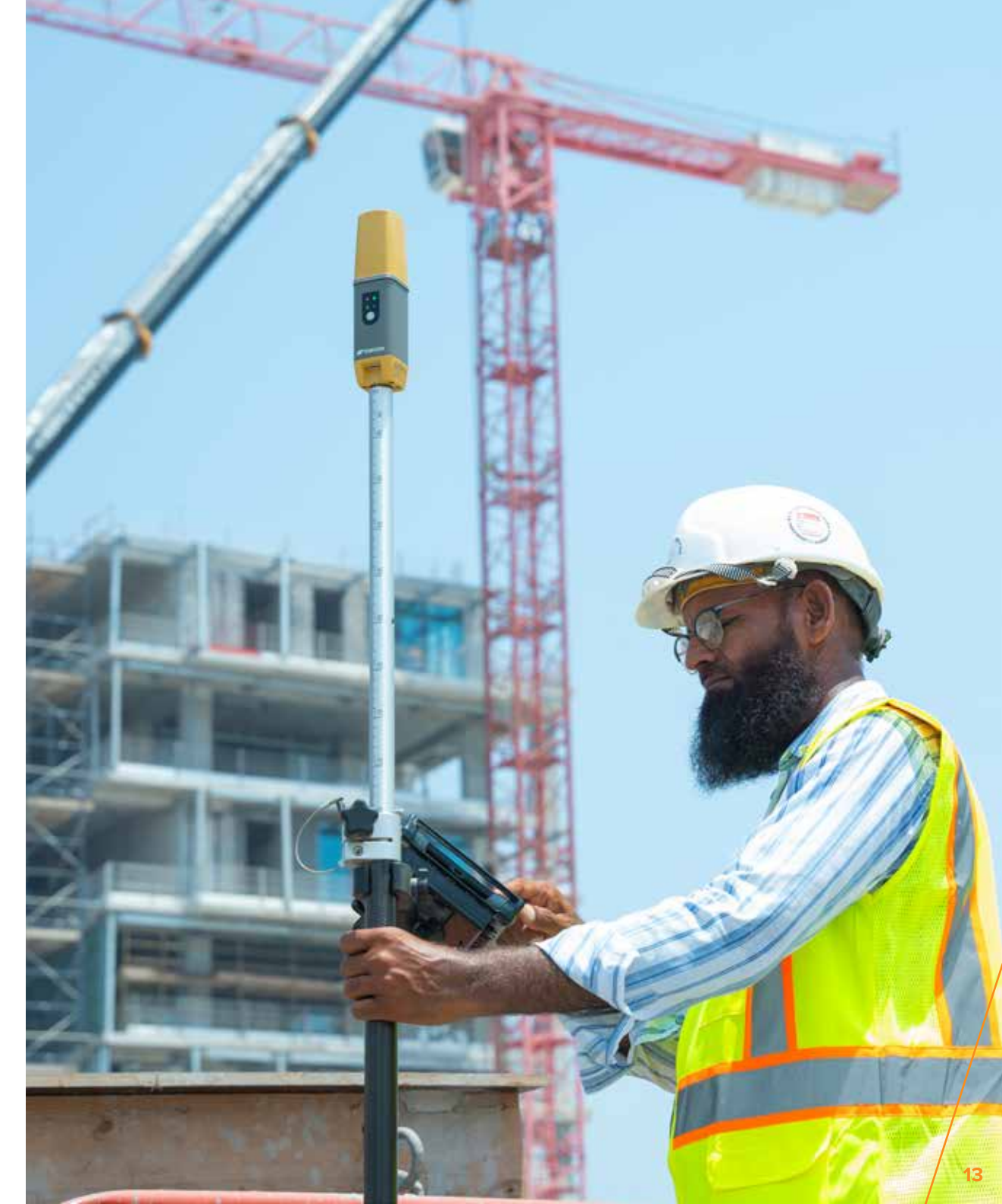
Get precise centimeter-level accuracy effortlessly with this compact powerhouse, ideal for various survey and construction tasks. The HiPer CR is an ultra-lightweight and compact solution that minimizes pole weight, ensuring easy mobility and field usability. Despite its small size, the HiPer CR integrated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



- > Compact and light-weight
- > Centimeter-level accuracy
- > Multi-constellation
- > Hybrid positioning
- > Longlink Bluetooth for base/rover functionality
- > Versatile applications



Learn more





Autonomous Construction Site Set-out

HP SitePrint

This groundbreaking solution in construction site layout automation is designed to revolutionise the way construction professionals handle site set-out tasks, offering unparalleled precision and efficiency.



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Save time and money on your construction layout

- > Increase productivity up to 10x versus manual set-out
- > Autonomous operation thanks to obstacle avoidance capabilities
- > Redeploy labour to focus on other tasks



Print accurate layouts on the slab

- > Print layouts with an accuracy tolerance of 3mm
- > Avoid costly errors and reworks driven by layout mistakes
- > Understand your site better than ever with enriched data



Easy to use tool for everyone on the jobsite

- > User friendly interface for easy operation
- > Robust industrial design adapts to construction environment
- > Increase safety and reduce injuries by improving layout ergonomics



Proven results from local businesses

“

It improves all our accuracy of our set out on site and having the ability to constantly check work as you go rather than going back after something's already been poured or something's already been set out.

Robert

Cadet - McNab Constructions

“

I would say we've become anywhere between 50 to 80% more efficient.

Murray Burgess

Contracts Manager - Kraftur

“

Before we got the Topcon system it was pretty chaotic on site waiting for surveyors to turn up and running stringlines all over the place. Now we don't have to measure off gridlines and it's a lot easier when we dig not having to use pegs. It's pretty easy to use, only took me a day to get the hang of it.

Beau Baker

Site Supervisor - Brady Contracting

“

The Topcon LN-150 has redefined the way we approach projects, with quality assurance front and center. Having the ability to check, and re-check our work, we are ahead of programme and have dramatically reduced reworks". Lachlan also says "It gives us greater confidence and flexibility to make informed decisions regarding staging, and programming. We can adapt at any time due to our increased capability. If we get held up in one area, we can redeploy to another and maintain complete control of our works.

Lachlan Hoch

Senior Project Engineer - Badge Constructions

NavVis Mobile Scanners for Construction

Optimise your workflows with dynamic reality capture technology that provides reliable as-built data, differentiates you from the competition, boosts efficiency, and reduces costs. Capture anything from small projects and confined spaces to larger, complex environments. Access up-to-date, reliable representations of physical sites for better understanding, planning, and collaboration across the construction lifecycle.

NavVis VLX 3

Wearable 3D Laser Scanner

NavVis V3 is a cutting-edge 3D scanning and mapping technology designed to capture high-accuracy digital twins of indoor spaces. It utilizes a combination of advanced laser scanning, camera systems, and proprietary algorithms to create precise, photorealistic 3D models of environments in real-time.



- > LiDAR Technology: Dual LiDAR scanners providing high-density 3D point cloud data at up to 640 thousand points per second.
- > High-Resolution Imaging: x 4 20 MP camera with 360° panoramic imagery for detailed visual context and improved data interpretation.
- > Scan Range: Effective scanning range from 0.5 to 50 meters, capturing large spaces with precision.
- > Accuracy up to 3.1mm in dedicated test environment



Learn more

NavVis MLX

Handheld 3D Laser Scanner

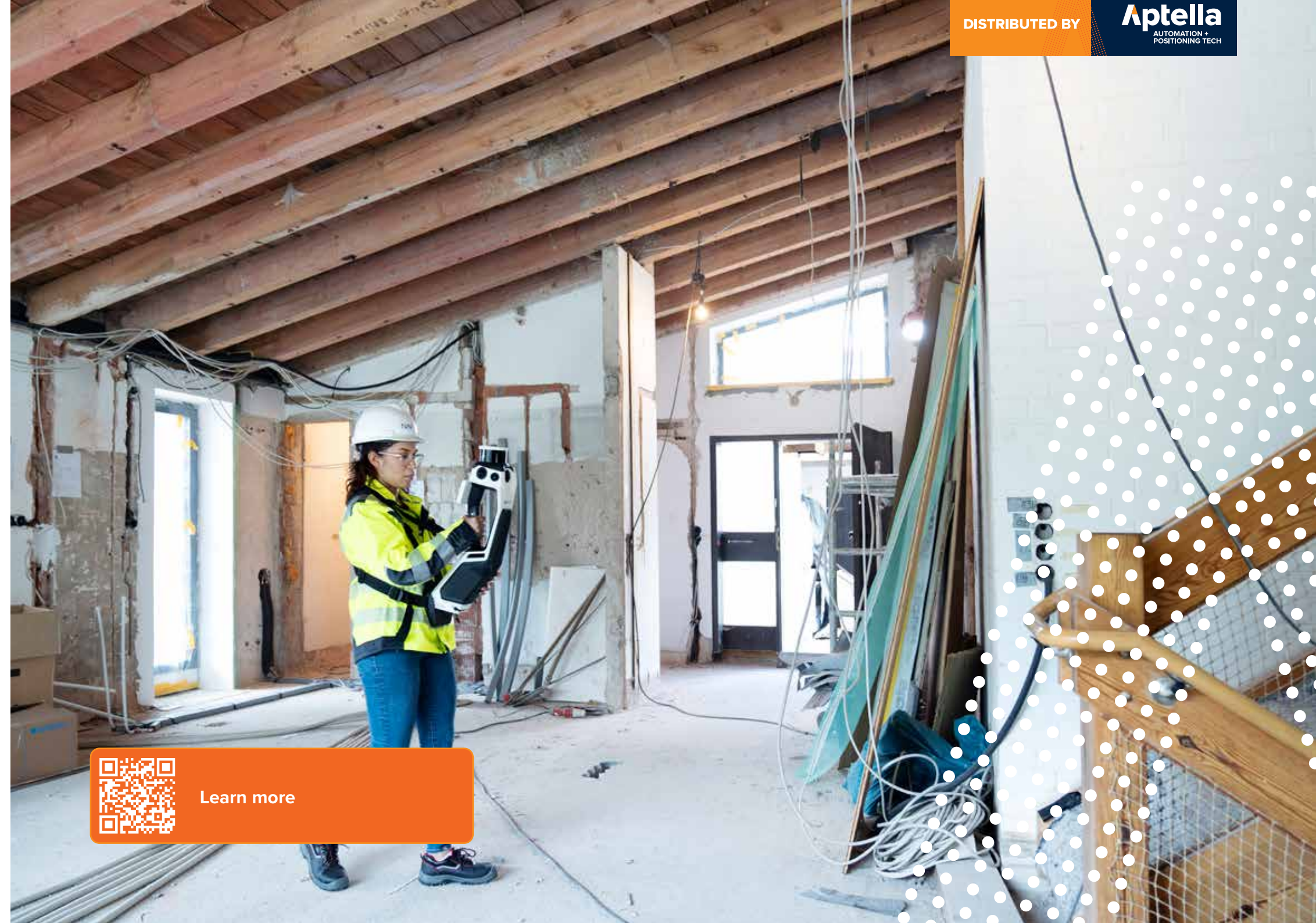
NavVis MLX offers an unrivalled combination of agility, ergonomics, and outstanding data quality from a handheld device. It seamlessly integrates into AEC, surveying, and reality capture workflows both on-site and in-office. An expertly engineered pairing of hardware and software, NavVis MLX delivers comfort and precision in one compact device, excelling in confined or complex environments. For projects requiring swift data capture at exceptional standards, NavVis MLX serves as your steadfast partner in the field and on the go.



- > LiDAR Technology: Single LiDAR scanner delivering high-density, accurate 3D point clouds at up to 640 thousand points per second.
- > High-Resolution Imagery: Integrated 12 MP camera for high-quality, 360° or 270° panoramic images
- > Scan Accuracy: High-precision scan data with an accuracy of up to 5mm for reliable results.
- > Lightweight and Portable: Compact design at only 3.6kg for ease of use and mobility in both indoor and outdoor environments.



Learn more





XGRIDS

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 reconstruction, 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.



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LixelKity K1

LixelKity K1 is a compact handheld scanning and modeling device newly introduced by XGRIDS. With a lightweight >1kg 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.



- > Compact and Lightweight: With a 1kg (with battery) aluminum alloy body, K1 highly integrated panoramic vision and LiDAR.
- > Real-Time Color Point Cloud, Delicate Presentation: 36 million pixels imaging provides exquisite real-time true-colour point clouds.
- > Panoramic Capture, No Omissions: 360° true panoramic vision, 360° laser horizontal scanning field.
- > Convenient Operation: Its low learning cost makes professional 3D data collection and modeling extremely simple.



Learn more

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 and sound monitor, together with the cloud based “Honeycomb” web platform, provides you with insight to noise and vibrations and helps you ensure that levels remain within the set limits. With Omnidots’ 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 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



Learn more

Senceive Wireless Monitoring

Increase safety and quality assurance with accurate monitoring of structures, buildings and excavations during construction work. Senceive is a versatile and easy to use platform that can be customised to your project, offering continuous monitoring and tiered alerts to notify and mobilise response teams quickly and efficiently.

Senceive’s core benefit to customers is in providing:

Safety Enhancing

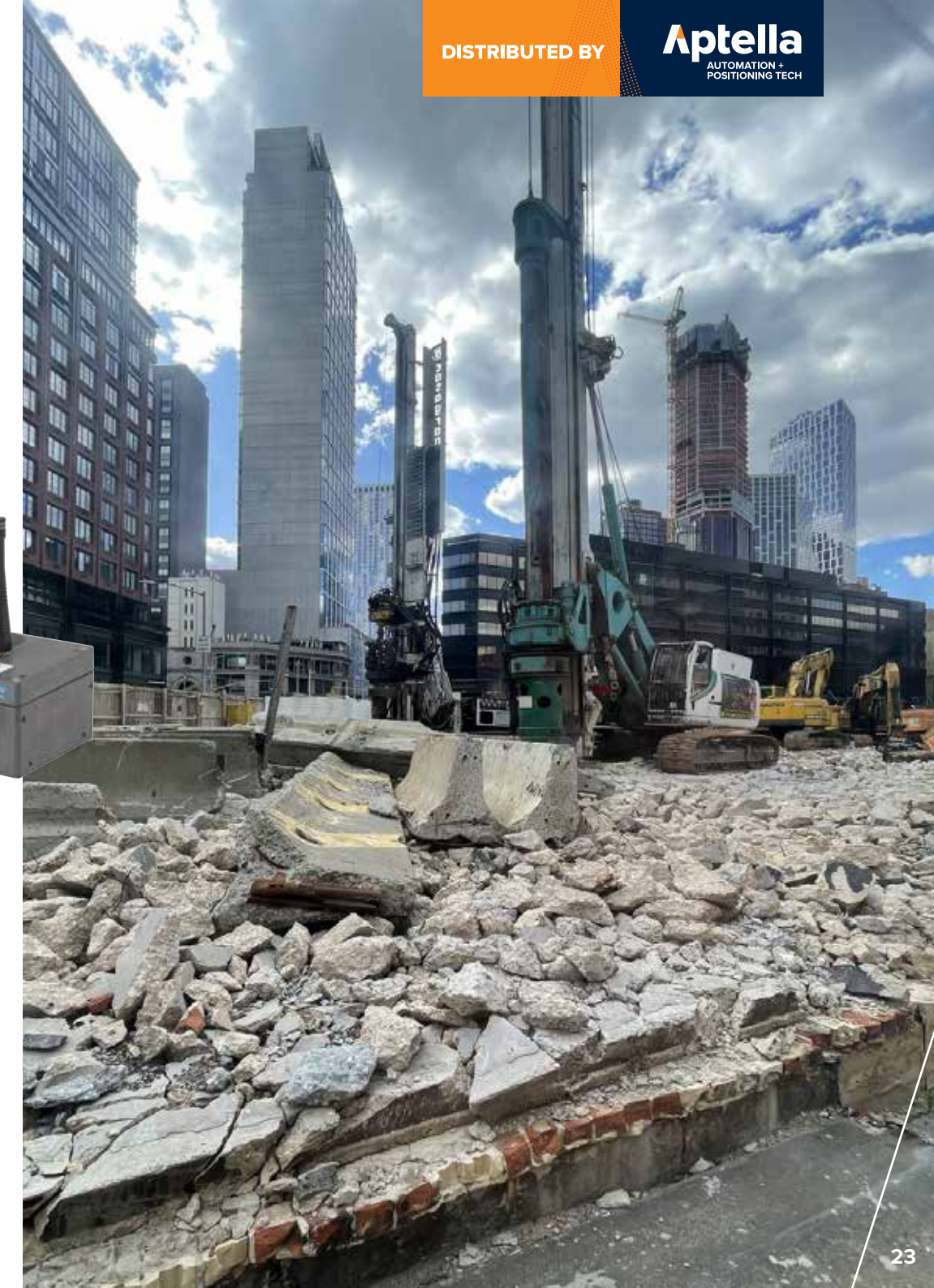
- > Keep all workers and contractors safe
- > Reassure key stakeholders with access to dashboards and reports
- > Meet QA and reporting requirements

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



Learn more



Laser levels

Topcon RL-HV2S

Premium With LS-100D

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, the RL-HV2S can handle single or dual slope tasks up to $\pm 5\%$, or even $\pm 15\%$ with the addition of a tilting plate. Turn it on its side and use it for layout and alignment jobs.

- > Long-range operation (800m)
- > Slopes up to $\pm 5\%$ ($\pm 15\%$ with tilting plate) can be used in either the X or Y axis
- > Horizontal, multi-slope and vertical applications
- > Tough IP66 construction rating
- > Topcon tough design with 5-year warranty and unparalleled accuracy



Topcon RL-H5A

Premium With LS-100D

The RL-H5A 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 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



Topcon TP-L6

Pipe Laser

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



Topcon DT-309

Advanced Digital Theodolite

With the DT-300 you'll be up and working fast, thanks to its simple interface and large, easy-to-see backlit LCD. There's an optical plummet that makes set up over a control point easy, and a tilt sensor that provides ± 3 minute angle correction. The DT-300 Series features two magnification choices of 26x and 30x, a super-short 3 ft. minimum focus distance for those tight areas, and angle accuracies of 5, 7, and 9 arc seconds.

- > High-accuracy measurements (5", 7" and 9" models)
- > Compact and light weight
- > Easy-to-use LCD backlit display(s)
- > Tough IP66 construction rating
- > Precise laser pointer guidance
- > Embedded tilt sensor for 5" and 7" models
- > Topcon tough design with 5-year warranty and unparalleled accuracy



Learn more

Machine Control

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



Learn more



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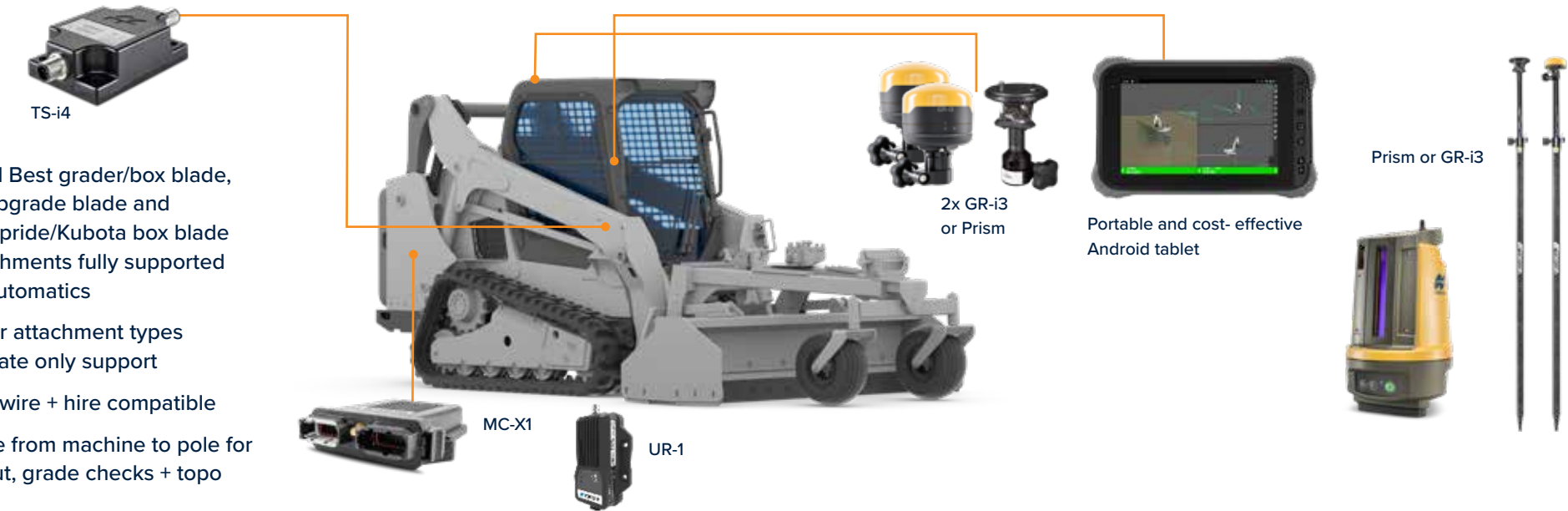
MC-Mobile Solution For Excavator

- > 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



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.



iDig

iDig is the world's best portable 2D Machine Guidance System for excavators. With wireless, solar powered sensors and a "Clip in – Clip Out" touchscreen the iDig can quickly be moved from machine to machine, offering accurate guidance for multiple attachments on a wide range of jobs, all with one system.

- > 2D depth, height and reach with Single and Dual Grade Guidance
- > Depth and Alignment Guidance for Auger Drill attachments
- > Intuitive with built-in help menu
- > Tilting Hitch or Bucket and Blade upgrades available



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



Learn more



Accessories



Nestle Yellow Tripod

Heavy Duty Circular Head

Lacquered, high-quality wood with special oil to protect the wood from humidity and water

- > Expands less than metal tripods
- > Handles the same as an aluminium tripods



Pole RTS Topcon Telescopic

Carbon Fiber Prism Pole

- > Comfortable grip in low temperatures
- > Tip made of hard metal
- > Indestructible scale written with patented laser engraving.
- > Locking Feature at 1.60m, 1.80m, 2.00m and 2.20m to secure heavy prisms or GNSS antennas



Mini Stakeout Pole

Fluro Yellow

Mini stakeout pole for surveying and construction applications

- > Measures 0.39 m
- > 5/8 x 11 Threads



Bipod Thumb Release

Construction Series Yellow

- > Poles attach easily through the open clamp 1.5 inch (3.81 cm) OD poles can be loaded through the top
- > The legs extend to 6 feet (1.8 m) and collapse to 43 inches (109 cm)



Myzox 360 Degree Mini Prism

DM Pin Prism Pole 9mm & Bag

- > 0mm prism constant
- > Repairable prism cubes
- > Sliding height adjustment
- > Built in circular level



Panasonic FZ-G2

Toughbook

- > Rugged tablet
- > 10.1" screen
- > Windows 11
- > Modular design



Marksman XY-010

Portable Surveyors Tripod

- > Accurate hands free targeting
- > 5/8 x 11 thread for rod point
- > 2" rubber comfort grips



Myzox Mini Bipod Set

Circular level

- > Height: 126mm (ground to 5/8" mount)
- > Mounting: 5/8" male thread



CTP1-A Prism

Construction Series

- > -7mm prism constant
- > 5/8x11" female threaded posts on top and bottom of the prism
- > Supports various quick mechanisms on tribrachs and other accessories



Myzox Z-360EH

Hybrid Prism

- > 0mm prism constant
- > Repairable prism cubes
- > Inbuilt hybrid adapter



Super Heavy Bag

For Tripods

- > Suits SECO, Tri-Max, and Nestle tripods
- > Measures 121.9 x 20.3 cm



Protection Bag

For Prism & Range Poles

- > Protects from dirt and moisture
- > Suits all SECO and Nestle poles
- > Measures 156.2 x 15.2 cm



Protective Case

With Insert

- > Watertight and dust proof
- > Laser cut foam
- > Easy-open double throw latches



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