



# **PRODUCT CATALOG**

Comprehensive Construction Technology Systems



www.sitechsw.com

## **TABLE OF CONTI**

#### MACHINE CONTROL SYSTEMS .....

#### **GRADE CONTROL SYSTEMS** ......

Simple Excavation **Compact Machines** Graders UTS for Graders Excavators Dozers Terrain Levelers & Trenching Paving & Milling Operations

#### **COMPACTION CONTROL SYSTEMS**

Asphalt & Soil

LANDFILL SOLUTIONS .....

DRILLING	&	PILING	<b>SYSTEMS</b>	
----------	---	--------	----------------	--

CONTROL BOXES

## SITE POSITIONING SYSTEMS ......

**Construction Surveying Total Stations** Controllers

#### SOFTWARE SOLUTIONS

VisionLink Unified Suite **Business Center** 

#### LOAD WEIGHING SYSTEMS .....

Wheel Loaders, Excavators & Haul Trucks Conveyor Belts & Mobile Crushers

#### SPECTRA PRECISION INSTRUMENT

Laser Levels Grade Levels **Optical Instruments** Pipe Lasers Accessories

#### **TRAINING AND SUPPORT SERVICE**

#### 

**Trimble Stratus** TOPS

# SITECH

SITECH Southwest is the leading technology solutions provider for the Construction, Mining, and Agriculture industries servicing Arizona and Southeast California. SITECH is an authorized dealer for Trimble, Caterpillar, and Spectra Precision providing sales and support for machine control, grade checking, and survey or engineering software solutions.

> As your construction technology partner, we can help you make smart decisions, decrease costly mistakes, and increase efficiency for your project. Let us show you how!

## **PROVIDING TOOLS TO REVOLUTIONIZE** YOUR CONSTRUCTION WORK FLOW

CB & CS COMPACTOR TECHNOLOG

ENTS		$\setminus$		$\times$	
	4				
	6				
			X		
				/	
				$\checkmark$	
5	15				
	16				
	17				
	18				
	19				
	22				
	24				
	24				
rs	26				
S	29				

# **MACHINE CONTROL SYSTEMS**

## MACHINE **CONTROL TECHNOLOGY**

Trimble offers a complete line of grade control systems - from laser or sonicbased through to 3D, these rugged systems are easy to use, fully upgradeable and flexible enough to meet a wide range of application and jobsite requirements. Gain a competitive edge and streamline your operations with the next generation of grade control systems from Trimble, the company that invented grade control.

Trimble GCS machine control technology works seamlessly with other manufacturers products providing a consistent system for your mixed fleet.



#### **2D MACHINE CONTROL SYSTEMS**

Provides accurate elevation control suitable for many projects from initial site prep through to the finished grading and paving. All components are easy to use, quick to set up and extremely durable to ensure the highest uptime and longest life possible in all conditions. Additionally, these systems can be operated in manual or auto mode; in auto mode the blade is automatically moved to the correct position.

CONFIGURATION	TARGET MACHINES	DESCRIPTION	KEY COMPONENTS
SINGLE ELEVATION	Dozers Graders	Single control system that uses a laser receiver to control the lift of the machine blade for flat work and finished grading.	Laser Laser Receiver Control Box
DUAL ELEVATION, OR ELEVATION AND BLADE SLOPE CONTROL	Dozers Graders Compact Machines	Dual control system that controls both the lift and tilt of the machine blade for flat work and slope work and finish grading.	Laser 2 Laser Receiver -or- Laser Receiver Slope Sensor Control Box
CROSS-SLOPE CONTROL	Graders Compact Machines	Cross-slope control system to be used on motor graders for fine grading work for road maintenance, ditches and slope work.	2 Angle Sensors Rotation Sensor Control Box
CROSS-SLOPE AND ELEVATION CONTROL	Graders Compact Machines	Highly flexible cross-slope and elevation control system for fine grading work with tight tolerances for road maintenance and construction, embankments, flat work and slope work.	2 Angle Sensor Rotation Sensor Laser Receiver -or- SonicTracer Control Box
DEPTH, SLOPE, AND ELEVATION	Excavators	Highly flexible system for excavation, trenching, grading and profile work.	Angle Sensors Laser Catcher Control Box
GRADE AND SLOPE CONTROL	Asphalt Pavers	Grade and slope control system for paving of base material and asphalt.	Sonic tracer Sonic averaging beam Contact sensor Slope sensor Control box

## FULLY **SCALABLE**

Only our machine control is flexible enough to let you equip your entire fleet - excavators, dozers, scrapers, graders, trimmers, milling machines, compactors, pavers and more – with fully upgradeable technology. Start where you need to start and add as you need to add. Sonic, angle sensors, laser, GNSS, total stations ... select the best option for the machine and application.

The most versatile grading technologies available. Built to significantly reduce material overages and dramatically improve productivity, accuracy and profitability. The 3D systems can be operated in manual or auto mode depending on the application; in automatic mode the design controls the blade for optimum accuracy and productivity.

CONFIGURATION	TARGET MACHINES	DESCRIPTION	KEY COMPONENTS
SINGLE GNSS	Dozers Graders Scrapers Excavators Compact Machines	Cost-effective, full 3D control system that measures the position and slope of the blade and compares that to design data for rough grading and mass excavation on complex design surfaces.	Angle and Rotation Sensors Single Smart GNSS Antenna Control Box Rugged On-Machine Radio
DUAL GNSS	Dozers Graders Scrapers Excavators Compact Machines	Full 3D control system that measures the exact position, cross slope and heading of the blade, bucket, drum for rough grading and mass excavation on steep slopes and complex design surfaces.	Dual Smart GNSS Antennas Control Box Rugged On-Machine Radio
SINGLE GNSS	Soil Compactors	Continuous compaction control and documentation for soil compaction with real-time material compaction mapping and detection.	Single GNSS Antenna(s) Compaction Sensor Control Box Rugged On-Machine Radio



## **3D MACHINE CONTROL SYSTEMS**

## SIMPLE EXCAVATION

SITECH Southwest has affordable 2D systems that can help you achieve excellent results for many projects not requiring 3D positioning like parking areas, runways, building sites and simple excavation. A Trimble GL series automatic grade laser and laser receiver will accurately measure depth and slope for any excavation. To measure the slope of the blade, add another laser receiver or a slope sensor. An in-cab Trimble CB450 or CB460 Control Box provides elevation and slope guidance so you can more accurately and quickly get to grade. Trimble 2D Grade Control can be upgraded to a 3D Grade Control Systems.



#### **TRIMBLE LR410** LASER RECEIVER

The Trimble LR410 is mounted to a mast on the blade and connected to the machine hydraulics controlling lift to a sub cm accuracy.

#### **TRIMBLE ST400**

The Trimble ST400 is mounted to the blade and uses a physical reference such as curb, gutter and stringline.



## **COMPACT MACHINES**

## **TRIMBLE CB450 CONTROL BOX**

Designed for use in harsh construction environments, the Trimble CB450 Control Box gives the operator a full-color graphical display for easy viewing and guidance to grade. Features include:

- 4.3" (10.9 cm) full-color LCD display with adjustable backlight controls.
- Audible tones for real-time grade guidance or warnings and alerts.
- Four LED lightbars to provide grade guidance at a glance.

#### SPECTRA PRECISION LR50 RUGGED **360-DEGREE LASER DISPLAY RECEIVER**

The Spectra Precision Laser LR50 Laser Display Receiver is designed to be used as a standalone display receiver or in conjunction with the CB30 on grading and excavating equipment including: dozers, excavators, backhoes, scrapers, and box blades. The easy-to-use LR50 features versatile 360-degree laser reception with built-in blade tilt and excavator boom plumb indicator.

The LR50 works with many types of rotating lasers on all types of machinery for fast, no-hassle setup. Rugged and waterproof, the LR50 receiver withstands all weather environments. Internal isolating shock mounts protect the electronics.

#### Features:

Built-in blade tilt indicator helps the operator keep the blade level for increased accuracy and productivity.

- Center on-grade provides an equal amount of grade information above and below on-grade. Use on dozers, graders, scrapers and box blades.
- Offset on-grade for productive excavation provides additional above grade information for less undercuts.
- Built-in plumb indicator for fast, accurate grade checking for excavators and backhoes.
- Up to six channels of grade information plus directional out-of-laser beam indicators.
- Three selectable accuracies meet job tolerances from rough grading to final finishing for maximum flexibility.
- Adjustable, ultra-bright LED with green on-grade display provides user an easy-to-see display to match ambient lighting conditions.









## **MOTOR GRADERS**



#### **TRIMBLE GCS900 3D GRADE CONTROL SYSTEM**

The Trimble GCS900 for graders with dual GPS can be installed on motor graders for a wide range of earthmoving applications helping contractors to significantly improve their productivity and profitability. The 3D Machine Control System on a motor grader is a full 3D control system that puts the site plan - design surfaces, grades and alignments inside the cab.

The Trimble patented dual GPS antenna configuration is preferred for GPS-based Grade Control Systems. Using GPS, the exact position, accurate cross slope, and heading of the blade is measured. This is especially advantageous for complex design surfaces such as super-elevation grading tasks.

The on-board computer uses this position information, and compares it to the design elevation to compute cut or fill to grade. This information displays on the control box screen in plan, profile, cross-section view, or text.

The cut/fill data is also used to drive the values for automatic blade control. Additionally, the cut/fill data is passed to the control box lightbars, providing additional visual guidance to the operator for up/down to grade and right/left to a defined alignment. The GCS900 on a motor grader can be operated in either indicate or automatic mode.



#### **3D SINGLE GNSS**

Trimble GCS900 is also available with a single GPS antenna that uses additional sensors for crossslope. Although not as versatile as the dual GPS system, it works well on less complex projects. The Single GPS option is upgradeable to the dual GPS or UTS Systems.



A SITECH UTS System on a motor grader with the Trimble Universal Total Station is ideal for contractors who need the flexibility to move from site to site, work in confined spaces, or require high-precision grading. For jobs where GNSS is not a viable technology, such as in urban canyons, mountainous areas, or on jobsites with numerous overhead obstructions such as overpasses, the total station offers a 3D grading solution.

#### **TRIMBLE UNIVERSAL TOTAL STATION**

The Trimble<sup>®</sup> SPS Universal Total Stations can control graders as well as dozers, excavators, pavers, milling machines and small machines.



# Trimble



### **TRIMBLE MT900 MACHINE TARGET**

Patented Trimble<sup>®</sup> Active Tracking Technology guarantees total station lock to the on-machine target and millimeter control of the machine.



## **EXCAVATORS**







#### **APPLICATIONS:**

- Roads and highways rough grading
- Large earthmoving projects dams, reclamation, etc.
- Landfills and waste deposits
- Commercial site prep- complex design
- Pipelines
- Underground utilities

#### TRIMBLE GCS900 3D GRADE CONTROL SYSTEM

The Trimble GCS900 Grade Control System with dual GPS can be installed on all excavators including those with tilt buckets and extended booms for mass excavation projects. The system uses two GPS receivers and solid state angle sensors to measure the precise 3D position of the tip of the bucket.

#### **FEATURES & BENEFITS:**

- Significant cost savings
- Less time to completion
- Less rework
- No waiting for stakes to be set
- More accurate, more consistent excavations
- Perform more complex excavation







#### INTUITIVE SOFTWARE, RUGGED HARDWARE

The Trimble Earthworks grade control application runs on the new 10-inch (25.7 centimeter) Trimble TD520 touch-screen Android display or third-party Android tablets. The software was created in collaboration with construction equipment operators around the world in order to optimize the interface for ease-of-use and productivity.

Colorful graphics, natural interactions and gestures, and self-discovery features makes Earthworks intuitive and easy to learn. Each operator can personalize the interface to match their workflow and a variety of configurable views make it easier to see the right perspective for maximum productivity.

Earthworks allows data files to be transferred to or from the office wirelessly and automatically ensuring you've always got the latest design.

#### TRIMBLE EARTHWORKS GRADE CONTROL SYSTEM

The new Trimble Earthworks Grade Control System is designed to help you do more in less time. Re-engineered from the ground up, our innovative, next generation grade control platform features intuitive, easy-to-learn software that runs on an Android operating system. Plus, state-ofthe-art software and hardware gives operators of all skill levels the ability to work faster and more productively than ever before.



## DOZERS

#### **DUAL OR SINGLE ANTENNA**

Dozers have the option to be fitted with one or two GPS receivers depending on the application. Your SITECH Southwest representative can guide you on the system that maximizes your productivity depending on your application. Single GPS systems with Indicate Function are often all that is required on bulk earthmoving applications. Upgrade to fully automatic and dual GPS configurations for more complex designs.

#### **TRIMBLE GCS900 3D CONTROL SYSTEM**

Helps you achieve accurate finished grade with fewer passes. Design information and live cut/fill indications are displayed in the cab, allowing the job to be done safer, faster and without the need for survey stakes. The dozer blade control can be completely automatic or the operator can use the in cab display and control the operation.

The system provides real-time information for monitoring avoidance zones and simultaneously collects as-built data as the machine cuts to grade. With VisionLink this information can even be monitored remotely from your office.

All SITECH Southwest's dozer systems include Trimble's GradeMax technology, which doubles the update rate for GNSS data controlling blade movement. Faster data means smoother, more consistent control and rapid recovery of the dozer blade so operators can now grade higher quality surfaces at faster speeds, on simple or complex designs, and in any material type.



#### **TRIMBLE GNSS MS995 SMART ANTENNA**

The Trimble MS995 is an integrated GPS+GNSS receiver, antenna, and isolation system all in a single, extremely rugged housing. It uses the advanced Trimble RTK engine for faster initialization time when satellite lock is lost and enhanced near obstructions.

Trimble



#### **TRIMBLE EARTHWORKS GRADE CONTROL FOR DOZERS**

The new Trimble Earthworks for dozers transforms machine control with integrated 3D intuitive capability. The new dozer configuration moves the receivers from the blade to the roof of the cab.

### MASTLESS DOZER CONFIGURATION

Trimble Earthworks for dozers mounts dual GNSS receivers on top of the cab to eliminate masts and cables traditionally located on the blade. The dual GNSS receivers are ideal for steep slope work and complex designs with tight tolerances.

The new configuration keeps valuable receivers safe and reduces removal and re-installation time, increasing efficiency each day.

### **INTUITIVE SOFTWARE, RUGGED HARDWARE**

The Trimble® Earthworks grade control application runs on Trimble TD520 touch-screen Android display or third-party Android tablets. The new dozer configuration software was created in collaboration with construction equipment operators around the world in order to optimize the interface for ease-of-use and productivity.







# **COMPACTION CONTROL SYSTEMS**

## **PAVING & MILLING OPERATIONS**



#### **TRIMBLE PCS400** FOR 2D PAVING

The Trimble PCS400 Averaging Beam uses three evenly spaced Trimble ST200 Sonic Tracers to average out uneven reference surfaces. The Trimble ST200 Sonic Tracers mounted on the averaging beam ignore irregularities such as grates and stones that could otherwise decrease accuracy. The beam measures at 10.9m (extended up to 13.9m) in length as required by some governmental agencies and swings back behind the paver to reference both the adjoining surface and freshly laid mat.





### **3D PAVING AND MILLING WITH TRIMBLE PCS900**

The Trimble PCS900 Paving/Milling Control System adds the accuracy and flexibility of 3D technology to your paving and milling operations, giving you the flexibility of operating in either 2D or 3D mode depending on the needs of your project.

The Trimble PCS900 uses highly accurate robotic total stations to precisely pave or mill with variable depth and slope based on the 3D design.

The Trimble PCS900 3D paving system regularly achieves asphalt mat accuracies of 3-6 millimeters, making it ideal for projects such as airports, large commercial surfaces and highways.

## **ASPHALT & SOIL**





#### **TRIMBLE IS310 INFRARED TEMPERATURE SENSORS**

The Trimble IS310 Infrared Temperature Sensors are installed on the front and rear drum of asphalt contractors to measure surface temperature of the mat in the direction of operation.



project. Mistakes during this phase can be very costly to fix. The Trimble CCS900 will calculate the exact position of the machine and display a color map indicating the current number of passes and possible overlaps. With two infrared sensors you can also measure the surface temperature ensuring the asphalt is at the correct temperature for compaction.

## TRIMBLE CCS900 SOIL **COMPACTION CONTROL SYSTEM**

Successful soil compaction requires each layer to have proper thickness, density and moisture. If one layer is not strong enough, due to under or over compaction, the road could possible fail. With the Trimble CCS900 Compaction Control System, you can easily measure and record accurate pass counts and soil stiffness, ensuring operators perform properly, giving clients confidence in your work.

#### TRIMBLE CM310 **COMPACTION SENSOR**

The compaction sensor measures compaction value, vibration frequency and vibration amplitude for vibration rollers.



## LANDFILL SOLUTIONS

# **DRILLING & PILING SYSTEMS**



#### **VISIONLINK LANDFILL**

VisionLink Landfill tracks the compaction and fill processes at your site when coupled with landfill compactors installed with Trimble CCS900 Compaction Control Systems. VisionLink Landfill tracks the compaction efforts of GPS-equipped compactors, and calculates the waste volumes placed and the compaction densities achieved in active cells. Optimize compaction and maximize landfill life with VisionLink Landfill.

#### **KEY FEATURES:**

An easy-to-use solution for greater efficiency and productivity in the office and on the site.

- Volume and density calculations
- Multi-site tracking
- Comprehensive reporting
  - Configurable dashboard

- Compaction mapping Compaction density
- Landfill life estimates Scale weight entries

#### Volume and Weight

Volume and weight are required to calculate density and are also important metrics for good landfill management.

- · Weight values are entered or imported by the user.
- Volumes are calculated using the difference of the current surface and previous day's final surface.
- Both volume and weight are displayed on the graph daily.

#### Volume and Time

The volume and time widget offers a snapshot of volume history to project landfill life.

- Running summary of weekly and monthly volume totals.
- Calculates the airspace remaining for the landfill based on the top of waste design and current elevation.
- Estimates landfill life remaining using the volume remaining and average volumes added calculations.

out as fast.

**Drill Evenly Spaced Inclined or Vertical Holes** A uniform blasting pattern delivers better surfaces and improves rock fragmentation to minimize hauling expense.

Increase Site Safety Using DPS900 for navigation increases safety by notifying operators of areas to avoid, reducing blind spots and removing the need for people to stand near the machine.

- Foundations

#### **DPS900 PILING SYSTEM**

## Automate Blow Count Recording

Reduce human error and generate accurate reports to maximize machine use.

## **Position Piles Accurately Without Stakes**

Piles are in the right place the first time to minimize costly re-work.

#### **Reduce Navigation Time Between Piles**

Small increases in production add up to significantly more piling time per day so you can make more money.

#### **Increase Site Safety**

Using DPS900 for navigation increases safety by notifying operators of areas to avoid reducing blind spots and removing the need for people to stand near the machine.

#### The DPS900 Machine Control System is ideal for:

- Structural foundations
- Retaining walls
- Coffer dams
- Solar or wind farm installations

## **DPS900 DRILLING SYSTEM**

#### Drill to the Exact Depth Needed

Reduced overdrilling means your machine drill bits and hammers won't wear

#### **Reduce Time and Money Spent On Surveyors and Stakes**

Stop pounding stakes and start making money.

#### The DPS900 Machine Control System is ideal for:

- Large construction cuts
- Aggregate quarries
- Mining operations
- Geological/geotechnical sampling
- Exploration (oil, gas, mineral or water)



# **CONTROL BOXES**

# SITE POSITIONING SYSTEMS

## FOR SPECIFIC APPLICATIONS

#### **TRIMBLE TD520**

The Trimble Earthworks grade control app runs on the new 25.7 centimeter Trimble TD520 touch-screen Android display.

- Colorful graphics, natural interactions and gestures, and self-discovery features make Earthworks intuitive and easy to learn
- Personalized interface with configurable views for each operator make it easier to see the right perspective for maximum productivity

#### **TRIMBLE CB460**

- Large screen size: 178mm, 800(w) x 480(h) pixel, 256k true color, TFT active matrix, 1000 (typ) cd/m2. LCD brightness is adjustable over a suitable range to accommodate different working conditions
- Windows CE 5.0 Operating System
- Both serial and Ethernet connections for increased sync speed
- 4GB Memory
- USB Host Port on Front Face protected with self closing Protective Cover
- 4 x Integrated Lightbars. Each Lightbar has 1 central Green LED with 3 Amber LED's each side of the central LED
- Ambient light sensor for Automatic brightness control
- 17 Logically placed backlit keys which provide crisp tactile feedback when activated
- 39-pin sealed military rated quick release tool-less connector
- Field upgradeable software via USB 2.0 port
- In-built buzzer (with adjustable levels) for Operator feedback and warning

#### **TRIMBLE CB450**

- 109mm, 480(w) x 272(h) pixel, 256k true colour, TFT active matrix, 450 (typ) cd/m2. LCD brightness is adjustable over a suitable range to accommodate different working conditions
- USB Host Port on Front Face protected with Silicon Cover
- 500Mb Memory
- 4 x Integrated Lightbars. Each Lightbar has 1 central Green LED with 3 Amber LED's each side of the central LED
- Ambient light sensor for Automatic brightness control
- 7 Logically placed backlit keys provide tactile feedback when activated, allowing operators to focus on the job and not the controls.
- 39-pin sealed military rated quick release tool-less connector
- Field upgradeable software via USB port
- In-built buzzer (4 Volume settings) for operator feedback and warning

#### The Trimble CB450/CB460 Can Be Configured For Your Specific Application:

2D Indicate, 3D Indicate, 3D Automatics









#### **TRIMBLE SPS986 SMART ANTENNA**

The ultra-rugged Trimble SPS986 GNSS Smart Antenna is a valuable solution for contractors who need a precise GPS/ GNSS Rover for their surveying and engineering departments. Ideal for use on small and large jobsites, the Trimble SPS986 can serve as a GNSS rover system or as a Wi-Fi capable base station for other GNSS operations including machine control.

- GPS and all other available constellations
- Fastest RTK engine
- Geodetic antenna with multi-path rejection
- Internal radio
- Remote support and configuration
- Connects through bluetooth
- High precision, 440 channels

#### TRIMBLE SPS855 GNSS MODULAR RECEIVER BASE STATION

The Trimble SPS855 GNSS Modular Receiver is simply the most advanced construction modular receiver on the market. Easily configurable as a base or rover with a range of antenna options, the SPS855 is a truly universal GNSS receiver capable of any operation.







**CAR MOUNT** 



**TDL 450 RADIO** 

# SITE POSITIONING SYSTEMS

## **TOTAL STATIONS**

#### **TRIMBLE SPS730 / 930 UNIVERSAL**

- One man operation and machine control compatible
- Robotic range of 500 meters
- Up to 1300m reflectorless range
- Trimble MultiTrack technology Locks on and tracks passive prisms for monitoring or control measurements and active prism targets for dynamic measurements required for grade control applications
- Trimble SurePoint technology Automatically compensates the horizontal and vertical angles and instrument pointing for accuracy of the instrument

- Patented high speed Trimble MagDrive technology
- turns the instrument up to 115° per second • 3Hz DR scanning - Super fast scanning measurements
- and stockpile scans The Trimble SPS930 Universal Total Station is
- accurate to one arc second in the vertical and horizontal angle
- The Trimble SPS730 Universal Total Station provides three arc second horizontal accuracy and two arc second vertical accuracy



### **TRIMBLE SPS620 AND SPS720 ROBOTIC**

- One man operation
- Robotic range of 500 meters
- Up to 800m reflectorless range
- Up to 5000m with 3 prisms
- Trimble Active Target Tracking Technology
- Patented high speed Trimble MagDrive<sup>™</sup> technology
- The Trimble SPS620 provides five arc second accuracy for the vertical and horizontal angle measurements.
- The Trimble SPS720 provides three arc second accuracy in the horizontal angle and two arc second accuracy in the vertical

• Both offer a high performance, cost-effective solution

for job sites that do not need machine control



#### **TRIMBLE TS662 / TS635**

- Long-range reflectorless measurements up to 300m
- Single prism range: 3000m (TS662), 5000m (TS635)
- Precision measuring accuracy: 2"/0.5 mgon (TS662), 5"/1.5 mgon (TS635)
- Rugged, IP66 rating to withstand construction conditions
- Absolute encoded, dual axis compensated
- Alpha-numeric keyboard with dedicated keys for menus and modes
- Illuminated graphic display for easy operation in field · Intuitive on-board software
- Dual lithium-ion batteries for a full day of continuous use, up to 19 hours
- Can be used with Trimble TSC3 data collector



## CONTROLLERS

## **TRIMBLE TSC7**

The Trimble TSC7 Controller is a wirelessly connected, rugged handheld controller for GNSS or total station operations. It gives construction surveyors, grade checkers, and site engineers total control over their on-site tasks. Designed for construction site operations, the TSC7 offers integrated Wi-Fi and bluetooth, built-in cameras, and GPS in a lightweight, shock, dust and water resistant package.

#### Features & Specifications:

- Optimized for Trimble Siteworks Software
- Large 7-inch multi-touch screen for finger, gloves
- or stylus
- Sunlight readable display
- Secure Windows 10 Pro operating system
- Intel Pentium processor with 8 GB RAM and 64 GB internal memory
- Comprehensive connectivity options
- Front- and rear-facing cameras
- Backlit keypad with customizable button commands
  - Ergonomic form factor
- Hot-swappable batteries with LED indicators

#### **TRIMBLE SITE TABLET 10**

Trimble brings the advantages of fast computing power and a large screen to the field with the Trimble T10 Tablet. Integrated GNSS capabilities close the gap between office design and field implementation enabling design changes in the field, instant approvals and fast communication of changes to field crews. From the field, to the truck cab, to the office, users stay connected, work more and drive less.

#### Features and Specifications include:

- Military-grade ruggedness
- Microsoft Windows 10
- 10.1-inch, sunlight readable display
- Long-life lithium-ion batteries





# **SOFTWARE SOLUTIONS**

## **VISIONLINK UNIFIED SUITE**



No matter what your operational needs are, VisionLink Unified Suite applications can help you reduce costs and increase efficiency. VisionLink offers a unified view of health, location and productivity for your fleet, regardless of machine manufacturer.

#### **UNIFIED PRODUCTIVITY**

#### Helps project managers, foremen and operators maximize site efficiency

- Cycle counts based on load and dump
- Monitor cycle times and load counts to track actuals against planned, and monitor jobsite productivity
- Task-focused applications to simplify the user experience
- Productivity metrics based on working, idle and run times
- Configurable dashboards, summaries, alerts and reports
- Improved mobile experience on tablets and smartphones
- Supports mixed fleets
- View individual machine performance or aggregate fleet data to see an entire site at a glance
- Monitor productivity against plan and accurately estimate completion times to keep jobs on schedule

#### **UNIFIED FLEET**

#### Developed with the fleet or equipment manager and owner/operator in mind

- Configurable dashboards to focus on the data that is important to you
- Use site boundaries to create triggers for theft mitigation, inappropriate machine use and compliance with avoidance zones
- Minimize idle time to help with fuel economy, and identify equipment that would be better utilized on other sites to reduce costs and increase efficiency
- Reduce owning and operating costs
- · Compare working day hours, runtime hours, and working versus idle time to improve equipment utilization and increase productivity

#### UNIFIED SERVICE

#### The go-to tool for fleet owners, maintenance managers and service managers or technicians

- Improve equipment productivity, minimize downtime
- Quickly assess machine operational status
- Set alerts and preventive maintenance (PM) schedules
- Schedule and track progress of equipment maintenance activities
- Review fleet service and maintenance history
- Stay on top of asset vitals and operator-induced events to increase the life of assets and reduce downtime
- Monitor machine hours to plan and manage equipment maintenance and decrease equipment depreciation costs

## **BUSINESS CENTER**

#### **BUSINESS CENTER**

The easy-to-use, graphical Business Center is ideal for the preparation and management of data for heavy and highway construction projects.



#### TRIMBLE CONNECTED COMMUNITY 2-Way Data

USB sticks and cables are a thing of the past. With Wireless Data Sync you can download and upload files by using the transfer button on your field device, or even set up an automatic sync so the field device files are uploaded to Connected Community automatically. Field and machine crews can send the office team work files effortlessly with no drive time. So everyone is on the same page, in real-time.

#### **REMOTE ASSISTANT**

When a member of your field crew calls the support line, technical support logs into Connected Community and selects the operators Control Box or Controller to see what the operator sees. Everyday issues such as design file versioning and machine configuration for grade control can be addressed without ever leaving the office or taking the machine out of production.



- Field data management with Trimble grade control, paving control and site positioning field systems
- Data preparation for machine control and site positioning systems
- Quantities takeoff and cost estimating
- Construction planning using site and corridor mass haul
- 3D visualization using multiple surfaces, corridors, textures and images
- Adobe PDF importing and onscreen digitization
- Integration with Connected Community facilitates file sharing and data visualization
- Easy volume calculations
- Network adjustment
- Site Takeoff
- Road Takeoff



# LOAD WEIGHING SYSTEMS

## **LOADERS, EXCAVATORS & HAUL TRUCKS**



#### **TRIMBLE L3180 LOADRITE** LOADER WEIGHING SYSTEM

The new Trimble L3180 LOADRITE SmartScale offers greater loading accuracy with precise weighing artificial intelligence that adjusts for rough terrain, technique, and movement so new and skilled operators can load accurately with confidence and speed.

- Large 14.5cm display screen
- Weighing artificial intelligence
- Connected Quarry connectivity including built-in Wi-Fi and GPS
- Multi-axis Inertial Measurement Unit (IMU)
- Smart Data Sync



#### **EXCAVATORS**

Designed and engineered specifically for bucket excavators, Trimble LOADRITE X-series excavator scales use proprietary Multi-Dimensional Compensation weighing technology to achieve accurate weighing performance.



#### LOADRITE LP930/LP950 PRINTER

Time stamped and dated hard copies of payload information printed either in the cab or in the office. Wireless reporting options are also available.



### **HAUL TRUCKS**

The Trimble H2250 provides near real-time reporting of haul truck production and process monitoring including automatic haul truck load counting, payload measurement to within +/-3% accuracy, cycle time analysis and truck speed monitoring.

## **CONVEYOR BELTS & MOBILE CRUSHERS**



The Trimble LOADRITE C2880 is an advanced conveyor belt weighing system for the demanding requirements of a modern quarry. It couples highly accurate weighing with state-of-the-art data communication capabilities and superior information management solutions.



Trimble LOADRITE offers several data communication solutions to send data from your LOADRITE weighing system to an office PC in a secure, paperless manner.

#### **MOBILE CRUSHERS**

The Trimble LOADRITE C2880 belt scales allow you to manage your mobile crushing plants like never before. By ensuring your mobile plants are producing you the tonnage you expect, you will get more profitable crushing.

## **TRIMBLE INSIGHTHO**

Trimble InsightHQ is a quarry management portal for your web browser or mobile device. It shows near real-time productivity, availability and performance dashboards as well as reports for extraction, processing and load-out.

#### **Key Features:**

- Track tons per hour from your mobile equipment and fixed plant Precisely track inventory
- Identify bottle necks and pinch points in your process
- · Monitor machine stress to schedule preventive maintenance
- Maximize utilization by identifying equipment with unused capacity • Track loadout operations

Trimble LOADRITE Communication Options LOADRITE™ enables you to transfer data via the following technologies:

- LOADRITE<sup>™</sup> Data
- Module
- 900 Mhz Radio Link
- Modem • Wi-Fi 802.11 a/b/g

Network

- GSM / GPRS Cellular Ethernet Network Serial Connection
- 2.4 GHz Radio Link

## **SPECTRA PRECISION INSTRUMENTS**

## LASER LEVELS



#### LL500 – Longest Range, Highly Accurate Leveling Solution

Accurate, stable and reliable, the Spectra Precision Laser LL500 is the ideal one-person leveling system for a range of everyday elevation measurements on the construction site. Designed for use on the job site, and reliable even in the harshest of conditions, today more contractors around the world use Spectra Precision Lasers to increase productivity and profitability.

#### **Applications:**

Taking grade shots

• Excavating cutting depth

Basement excavation

Digging septic tanks

Checking foundations

- Checking and adjusting elevations
- Digging footings
- Setting forms
- Checking sub-base materials
- Screeding concrete
- Slope on grade

We carry a series of laser levels, contact us to find the one that meets your needs.

## **GRADE LEVELS**



## **GL710 SINGLE GRADE**

An easy-to-learn, easy-to-use, one-person grade laser, economical and accurate up to a 900 m (3,000 ft) diameter. Ideal for general construction, site preparation, trenching and pipe laying applications.



### **GL720 DUAL GRADE**

This economical choice has +/-10% in the X-axis grade range and -0.5 to +25% Y-axis grade range with high accuracy up to 900 m (3,000 ft) diameter. Ideal for general construction and machine control grade applications.



### **GL722 DUAL GRADE**

With long-range radio remote and the same range and base capabilities as the GL720, the GL722 includes the benefits of the full radio remote functions plus, automatic axis alignment capability. Ideal for general construction, site preparation and road construction.



#### GL742 STEEP GRADE LASER (TO 110%)

The GL742 includes all the features of the GL722 - including full radio remote - with the increased capability of achieving a steep grade range of 110%. Ideal for all general construction and machine control applications, as well as steep slope applications such as highway embankments, seawalls and landfills.

## **OPTICAL INSTRUMENTS**



#### AL24A – Easy-to-Use Optical Auto-Levels

and landscaping.

Reliable automatic compensators ensure stability and accuracy in the line of sight. Telescope optics are bright and clear providing sharp images for ease of viewing. A short focusing distance provides better performance in tight spots or on steep slopes. Stadia lines on the reticle make distance calculations easy. A horizontal scale directly below the eyepiece makes angle measurements quick and convenient.

All models include a hard-shell carrying case, plumb bob, rain hood, hex key wrench, adjusting pin, and user guide.

#### **DET-2** – Full Featured Angle Measuring Digital Electronic Theodolite

The Spectra Precision DET-2 is a rugged, cost-effective theodolite designed to give accurate angle measurements in general construction applications. The affordable, versatile, easy-to-use instrument and accessories will increase your productivity when turning angles and setting elevations and lines.

#### **Applications:**

- Establishing 90 degree reference lines
- Checking angles, alignment, and plumb
- Anchor bolt alignment
- Gravity flow pipe laser setup
- Steel column placement
- Basic grade work



The automatic levels are designed for a variety of elevation control and alignment tasks including general building construction, cut and fill measurements, area leveling,

• Alignment of forms, tilt-up walls, and curtain walls

# **SPECTRA PRECISION INSTRUMENTS**

# SUPPORT

## **PIPE LASERS**



#### DG613, DG613G, DG813,

Designed to fit around tighter inverts, the Spectra Precision DG613 and DG813 deliver the most productive pipe-laying experience on the market. They are extremely rugged and thrive in demanding underground conditions. Benefiting from the latest technology developed by Spectra Precision, the beams move quickly and accurately for alignment and grade. The top of the line DG813 model includes a smart Spot Finder SF803 which allows for automatic laser alignment as well as grade calculations, further increasing productivity.

## ACCESSORIES



#### TRIPOD

Ideal for mounting theodolites, lasers, auto levels, or total stations.

#### **GRADE ROD**

The cut or fill measurement on the One Shot<sup>®</sup> is read directly on the rod, the correct measurement is virtually guaranteed — no math errors. Durable construction of the rod means no brittle or easily breakable tapes or parts. Eight foot length in either inches or 10ths graduations.

#### **Applications:**

- Grading
- Masonry
  Sewers
  - Drainage
  - Slab work

• Foundations

Landscaping

Site work

• Forms



#### HANDHELD LASER RECEIVER

Highly versatile laser receiver for basic and advanced leveling & aligning applications.

The Spectra Precision HL700 Laserometer is designed for general, concrete and site preparation contractors. The HL700 Laser Receiver is an easy-to-use tool that accurately measures elevations across the site and is ideal for use with any rotating transmitter.

Note: Clamp and grade rod sold separately.

If you don't see the product you are looking for, please ask your Sales Rep. We carry a full line of Spectra Precision Instruments, SECO and SitePro products.

## TRAINING

We offer customized training and host a number of free learning seminars throughout the year including:

- New technology solutions
- Machine control
- Site technology demonstrations
- How to's on the latest Trimble Software
- Custom on-site training





## SERVICE

Quality technical support is essential for maximizing the productivity and reliability of your instruments and systems. Reduce your downtime and prevent unforeseen repair costs with periodic calibration and preventive maintenance from SITECH.

As a Trimble authorized service provider, we offer a wide range of technical services, including:

- Preventive maintenance
- Certification services
- Repairs
- Product upgrades ...and more!

# **DATA SERVICES**

## TRIMBLE STRATUS DRONE DATA PLATFORM FOR CONSTRUCTION

Trimble<sup>®</sup> Stratus software helps civil contractors use drones to map, measure and share accurate information about their worksites and assets. With Stratus, you can make quicker decisions, avoid mistakes, and grow profits by always having the right information on hand.



#### **BENEFITS:**

#### **Confidently Plan and Estimate**

 Know what you're quoting: Conduct your own site surveys before the job begins, and whenever changes occur.



#### Survey Frequently and Faster

• Get accurate, up-to-date topographic surveys whenever you need without having to bring in a survey crew.

#### **Communicate Effectively**

 A visual timeline keeps everyone on the same page. Track site changes, avoid crossed wires, and resolve disputes quickly.

#### Take Control

• Save on consultants and avoid information bottlenecks. Get answers to questions yourself with an intuitive, web-based tool.





Take-Off Professionals, a team of knowledgeable and experienced engineers, prepares 3D models for site work machine control, layout, and additional uses. This innovative process puts quality data at your fingertips, giving you the confidence you need for a successful project.









## **3D DATA SOLUTIONS SUPPORT**

• 3D data for machine control and layout. Includes: grading surfaces, 3D utility layout and utility trenches for rovers, machines, curb machines and pavers.

• Surface and layout files for contractors, engineering firms and surveyors.

• Point cloud processing for both pre-job topos, progress takeoffs and as-builts.

• Processing 3D data from any type of data collection, including: RTK, machine, LIDAR and photogrammetry.

• Personalized photogrammetry services including camera calibration, training and post processing. All you do is take pictures, and we'll do the rest.

• Earthwork Takeoffs with dirt and material quantities. Mass haul analysis for sites and roads. Haul road creation for the life cycle of the project.

## 623-776-9546 | takeoffpros.com



## 602-437-0410 sitechsw.com

1835 S. Macdonald, Suite 101 Mesa, AZ 85210 3885 E. Gila Ridge Rd. Yuma, AZ 85365

**PROUD TO PARTNER WITH:** 





