

Leica DigSmart The Guidance Solution for Excavators



- when it has to be **right**

Leica
Geosystems

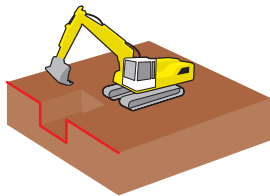


Leica DigSmart Solution

DigSmart provides excavator operators with real-time depth, slope and reach information, in relation to any reference, on an easy-to-read graphical display control panel mounted in the cab. The operator can choose what kind of information shall be displayed on the screen.

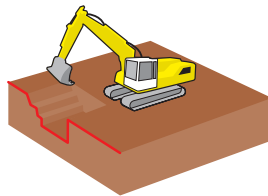
A highly visible LED light-bar gives the operator a quick reference to the desired level. An audible tone also gives the operator an 'on-grade' or 'near-grade' indication. All of the information necessary for an operator to do their job faster and more accurately is available in the cabin.

Leica DigSmart has the standard digging jobs covered



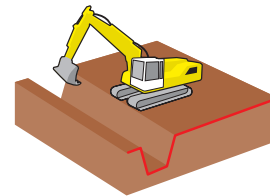
Trenching, layering and fixed depth

Simply enter the desired depth and slope and DigSmart will guide the operator in digging fixed depth jobs such as footers, as well as more complex work such as trenching and layering.



Slopes, grades, and profiles

If you are creating embankments and other single grades, just enter the desired slope and the system guides you. For more complex work, the DigSmart 'learn and dig' profile mode allows the operator to either manually enter a profile, or simply dig the profile once. DigSmart can then be 'taught' the profile from the actual work completed.



Blind cuts

Working on blind cuts or underwater is simpler, faster and safer due to the clear DigSmart graphical display of the bucket position. The bucket orientation and position relative to the desired grade or profile is shown.

Improved Profile Mode **NEW**

Leica DigSmart features improved graphics in the profile mode and can store up to 4 different profiles.



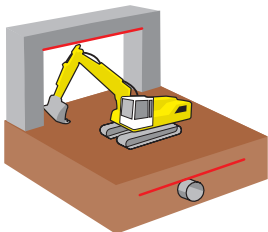
Rely on accurate measurement

With DigSmart you will always know the exact position of the bucket. Advanced CANbus based accelerometers are used to measure the position of the boom, stick and bucket. These sophisticated sensors are designed for the harshest environ-

ments including underwater. With no moving parts, the sensors are not only accurate but very reliable. When you are able to dig with centimeter accuracy the first time, material savings can be made and downtime minimized.

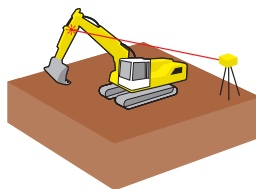
Automatic load weighing – Weighing on the move Option

Leica Geosystems' state-of-the-art 'weighing on the move' technology for excavators is available with DigSmart. The DigSmart weighing option automatically measures the weight of the load without having to stop the machine. It's easy and it's fast. Job tickets can be printed out showing the weight per load, the total weight and other relevant information.



Height/depth detection benefits

DigSmart allows operators to set a height or depth alarm that alerts them if they exceed defined limits. This allows operators to keep their eyes on the job. An independent grade checker is not required so workers are kept out of the working range of the excavator.



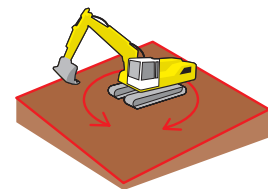
Fine precision jobs

- Laser Mode Option

For jobs that require even finer precision, you can integrate DigSmart with a rotating laser to provide a precision reference height and slope. You can catch the laser in every direction of the chassis, even with slopes.

MIN/MAX Height Setting **NEW**

When using Min/Max height setting, you need not to set the values again when moving the excavator and recatching the laser. The Min/Max values get calculated again according to the new laser reference.



Working in any direction on a

sloping surface – Dual Slope Option

DigSmart can be fitted with the Dual Slope system that allows you to work more efficiently and accurately in any direction on a sloping surface. Complete machine slope compensation increases accuracy, while being able to work in two slopes and in a wide 360° digging area improves efficiency. This option also includes Tilt Bucket support which gives the operator new levels of precision and control through clear feedback on bucket angle and position.

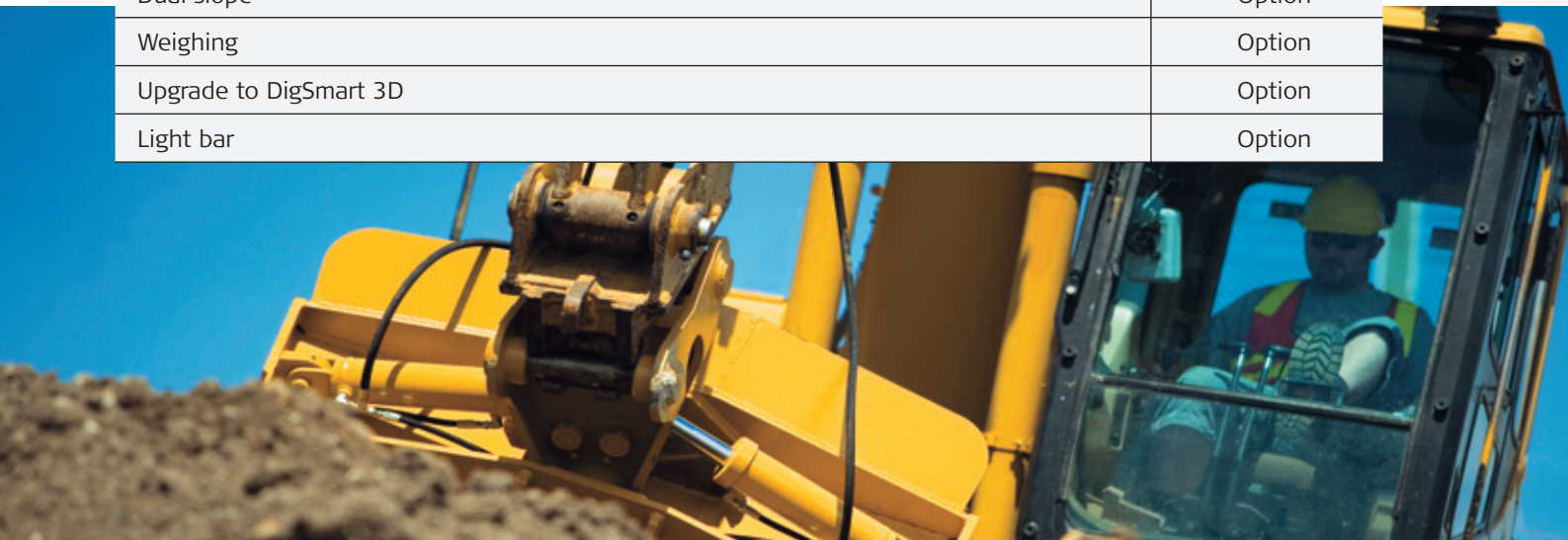


Growing with you – available upgrades

As your business grows so too can DigSmart. You can start with a basic single slope system, upgrade to dual slope, the weighing option, or even the full DigSmart 3D GPS based machine guidance and

control system. This modular approach protects your investment allowing you to add to the system when you need to.

Feature	DigSmart
Graphical Operator Control Panel	✓
Selectable display information. Operator can choose the guidance info he needs NEW	✓
MIN/MAX height setting NEW	✓
CANbus sensors	✓
Profile Mode	✓
Metric or US units	✓
Height/depth alarms	✓
Dual axis tilt bucket (IP67)	✓
Underwater dual axis tilt bucket sensor (IP68)	Option
Laser catcher	Option
3 rd boom sensor	Option
Dual slope	Option
Weighing	Option
Upgrade to DigSmart 3D	Option
Light bar	Option





Reach for Productivity Gains with **Leica DigSmart**

If you operate excavators you know how important it is to dig fast, be accurate, and to be in control of the job. You need the ability to cut to grade with complete confidence without stopping to check levels. DigSmart gives you the real-time information you need to increase the productivity of your machine by up to 50%. It's a reliable and flexible guidance solution that you can expand on to meet your future needs.

Benefits

Increased operator productivity

Eliminate down time to make grade level checks. Operators can do highly accurate cuts without needing special skills.

Increased machine productivity

Reach a better result with less passes! DigSmart provides you the real-time information you need to increase the productivity of your machine by up to 50%!

Reduced labour costs

Reduces or eliminates the grade checking.

Reduced material costs

Digging too much leads to extra transportation costs. DigSmart ensures accurate digging exactly to your planned profile. Use the "weighing on the move" option to automatically measure the load without stopping the machine.

Solve specific problems

Dig under water will full guidance. No need to do difficult stake outs; cut vertical slopes with high accuracy!

Asphalt, concrete or earth, shifting it or laying it. Whether you need simple laser height detection for excavators or need to control a concrete slipform paver to millimeters, Leica Geosystems can help you optimize site productivity with a complete range of machine automation solutions. Plan your own upgrade path to full 3D machine control workstations incorporating GPS navigation, terrain modelling software and automatic blade control.

Dozers, graders, excavators, concrete pavers and asphalt finishers are just some of the construction machines that can be fitted with scalable, tough and reliable Leica construction machine automation systems. With a wide range of support services to choose from, Leica Geosystems helps master your site.

When it has to be right.

Illustrations, descriptions and technical specifications are not binding and may change.
Printed in Switzerland – Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2007.
750065en – III.07 – RDV



Total Quality Management – our commitment to total customer satisfaction.

Ask your local Leica Geosystems dealer for more information about our TQM program.



Leica DigSmart 3D
Product Brochure



Leica GradeSmart
Product Brochure



Leica GradeSmart 3D
Product Brochure