

Leica PowerGrade 3D Advanced Grading Systems



Leica PowerGrade 3D High-performance, Flexible Grading System

Leica PowerGrade 3D will revolutionize the way you move dirt and fine-grade. It not only boosts your productivity and performance, it also offers unmatched flexibility.

Leica PowerGrade 3D can dramatically increase machine utilisation, productivity and optimize material usage on any earthmoving and fine-grading contract. It can be used with a wide range of sensors and combines ease-of-use, unrivalled flexibility with intuitive and powerful software.

The key to the Leica PowerGrade system lies in our unique PowerSnap concept – a single docking station allowing easy and quick exchange of panels. Simply swap the 2D with the 3D panel or even transfer the panels between machines. Just snap the control panel into place and get to work.

Key Benefits

Increased productivity

- Maximises your machine utilisation and return-on-investment from day one, by getting right to grade the first time
- Save time, setup and go in minutes. PowerGrade system remembers all your settings

Increased flexibility

- Unique Snap-on & Snap-off capability
- Easy removal of key components for overnight security. One docking station for all panels
- Fully scalable from basic 2D entry system to full 3D capability in the same control panel
- Simple upgrade step to 3D – buy a 3D-ready panel and upgrade later or rent the GPS/Tracker and 3D software

Reduced costs

- Faster job cycles reduce operating costs
- Reduce labor costs by reducing or eliminating grade checks



- when it has to be **right**

Leica
Geosystems

Leica PowerGrade 3D Advanced Grading Systems

Unrivalled Flexibility

Why be forced into buying a complete dozer or grader system for each machine in your fleet? Leica Geosystems' unique Snap-on and Snap-off capability allows you to change from one configuration to another as the job demands. For example:

Running in 3D mode today and 2D mode tomorrow? – Just switch operating modes.

Using the grader one day and your dozer the next? – Just transfer the control panel to the other machine.

If you are not sure you want to take the whole investment for a 3D control system today – then buy a 3D ready panel and upgrade later.

Fully automatic machine guidance

The Leica PowerGrade 3D system opens new dimensions in earthmoving and fine grading. The 3D system brings design surfaces and true road alignments inside the cab. You are no longer dependent on stringlines, stakes or hubs. You can now work totally independently, and more accurately, anywhere on the project design guided by a GNSS/GPS system or a robotic total station.

Using true 3D road alignments saves material, improves machine utilisation and lets you deliver your client a better finished product.

Technical Data

PowerGrade 3D panel

Display:	7" colour touch screen
Operation temperature:	-20° C – +55° C
Sealing:	IP67
Weight:	1,5 kg
Dimensions:	L 220 x W 160 x H 60 (90) mm

Docking station

Electrical input:	10 – 24 V (via junction box)
IR communication:	1 Mbit
Supply:	ON/OFF switch for power control of the entire system
2 x CAN:	Junction box and J1939
Serial output:	2 x RS232. RX, TX, 12 V/2 amp, GND
Operation temperature:	-20° C – +60° C
Sealing:	IP54

More advantages for increasing productivity:

- Contact-free control panel – no more connectors or cables
- Automatic Side-shift control for motorgraders with our unique Tri-Sonic or GPS/Tracker sensors. No more overcuts!
- Create a reference surface with up to four slopes without a 3D design model
- Hold-Slope feature allows precise crown cuts and extending past breaklines when needed
- Unique mast-tilt compensation – no more rebenching of the motorgrader blade between cut and fine-grading passes
- Works with many current total stations and GPS sensors
- Automatic power down when the control panel is removed. Machine specific settings are permanently stored in the docking station.

Fully customisable 3D views of your machine and jobsite – see the job exactly how you want to.

Design and actual slope

Auto/Manual information directly on the screen.

Offset/sideshift information to a reference line.



Quick access to important menu options

Plan or 3D View modes

Zoom in/out of all views.

Main Function Keys for easy access of the important functions.



Leica PowerGrade Docking station

Leica Geosystems' unique PowerSnap concept allows you easy and quick exchange of control panels and transfer of panels from one machine to another. Simple. Time-saving. Offering maximum flexibility in use.

Illustrations, descriptions and technical data are not binding. All rights reserved. Printed in Switzerland – Copyright Leica Geosystems AG, Heerbrugg, Switzerland, 2008. 766439en – IV.08 – RDV