

# Leica PowerBlade Automated Grading System



## Extremely rugged Machine Control System for the Agricultural and Construction Markets

The Leica PowerBlade system is a complete solution steered by the MCP-700 Control Box – easy-to-use and full of features. A choice of Laser Receivers allows you to tailor the system to your application. An extremely rugged Electric Mast and a variety of hydraulic options complete the system.

All components have been developed to meet the extra strain experienced on Dozers and agricultural Tractors. The Leica PowerBlade system features a very rugged and durable design and is up to any challenge.

## Versatile, Durable and Smart

- Designed for advanced agricultural land leveling (survey capability, automatic averaging, lift functionality)
- Fully equipped for operating Dozers with best results
- Variety of hydraulic valves can be operated and tuned (black/white, proportional, Danfoss)
- Choice of manual or automatic level control of the machine
- Very quick learning curve due to simple user interface
- Very bright LED display that can be read even in strong direct sunlight
- 360° capture range in 190 mm (8") window with any MD Laser Receiver.
- Proportional detection gives you the accuracy exactly where you need it
- 2,5 mm (1/10") accuracy independent of laser beam width
- Works with all types of lasers
- Choice of measurement units (metric, US feet, US inches)



- when it has to be **right**

**Leica**  
Geosystems

## Leica PowerBlade

# Automated Machine Control for the Agricultural and Construction Market

The system can be mounted on a broad range of machinery such as Scrapers, Dozers and agricultural Tractors, automatically controlling and adjusting the work.

### Control Box MCP-700

The Leica PowerBlade system offers 5 different indications of grade position including directional out-of-beam indicators. This information is shown where you need it, on the Control Box.

Selectable accuracies provide job tolerances from rough grading to final finishing.

The Control Box is waterproof (IP65) and uses an LED display that can be easily read, even in strong sunlight.

Two easy to operate switches let you choose between auto/manual mode and blade raise/lower. The well-laid out design makes the Control Box both easy to use and understand.

The system features a lift function allowing the operator to temporarily lift the blade without leaving automatic mode. This feature is especially helpful for coarse grading when great amounts of dirt are moved.



The survey function provides height information of a defined area even including an average height function. This feature makes land levelling a simple task.

The small size of the Control Box makes it easy to integrate into any machine.

### Electric Mast MPM-700

The Electric Mast MPM-700 was specifically developed for use in tough and demanding environments. The rugged design and the antivibration system of the platform are the ultimate

combination against damage in harsh construction environment.

### Laser Receiver MLS-700

The Laser Receiver is totally waterproof (IP68) and uses an LED display that can be easily read, even in strong direct sunlight. The Receiver has a 360° capture range, with a measurement window of 190 mm. It features 5 different indications of grade position. The Receiver communicates and is powered via true CAN bus from the MCP-700.

Technical Data	MCP-700	MLS-700	MPM-700
<b>Power Supply</b>	11 – 30 V	Via MCP-700/MPM-700	11 – 30 V
<b>Size</b>			
Length	170 mm (6.7 in)	–	–
Width	75 mm (2.9 in)	130 mm (5.1 in)	440 Ø mm (17.3 Ø in)
Height	120 mm (4.7 in)	270 mm (10.6 in)	1844 mm (72.6 in)
<b>Weight</b>	2 kg (4.4 lbs)	2.5 kg (5.5 lbs)	30 kg (66 lbs)
<b>Measurement window</b>	–	190 mm (7.5 in)	–
<b>Mast travel</b>	–	–	1200 mm (47.2 in)
<b>Waterproof</b>	Yes (IP65)	Yes (IP68)	Yes (IP45)
<b>Operating temperature</b>	-20° to +60° C (-4° to +140° F)	-20° to +60° C (-4° to +140° F)	-20° to +60° C (-4° to +140° F)

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