



3D-MC^{MAX}
INTEGRATED 3D DOZER SYSTEM





3D Dozing

- Single or dual antenna configurations
- Support for 4-way, 6-way, and pitch controlled blades
- Eliminates the need for GNSS mast
- Superior performance for any rough or fine grading job site application
- Increased blade response
- Accurate as-built data for volume and productivity reporting

A revolutionary dozing system, 3D-MC^{MAX} delivers the highest productivity dozer solution for any rough or fine grading application. 3D-MC^{MAX} uses our industry leading MC²+ IMU sensors on the body and blade as well as an optional third IMU on the C-frame – all to keep the blade cutting edge on grade for any application. This system was built to keep you productive on any job site – providing maximum speed, maximum control, and maximum performance.

Slim and trim – a clear path ahead

The power of the system lies within the IMU sensors. These robust and highly precise sensors work together with ruggedized cab-mounted antennas conveniently placed in a secure location on the machine. This intelligent design gives the operator unobstructed visibility and the flexibility to doze at full throttle on any surface, under objects, or while in reverse.

Any application, anywhere

The 3D-MC^{MAX} system can be used for fine grading applications such as those traditionally done by motor graders. With support for 4-way, 6-way, and pitch controlled blades, any dozer operation can benefit from a 3D-MC^{MAX} system. The MC²+ IMU sensors work together to keep the blade as close to the surface as possible, delivering a smooth and consistent pass for any slope.

Outperform the field with the 3D-MC^{MAX} system. It takes advantage of every movement made when the machine is in motion and allows you to cut finish grade while driving in reverse at high speeds. The results – a substantial increase in your productivity.



3D-MC machine control software

The GX-55 control box is intuitive and modern, our machine control software seamlessly drives all components in the 3D-MC^{MAX} system.

Visualize your every movement and have the integrated LED light bars guide you when you're on grade.



MC ²⁺ IMU	
Supply Voltage	9 to 32 VDC
Ports	RS-232/485 CAN (J1939 compatible)
Housing	Powder coated cast aluminum
Connectors	10-Pins Box Mount, Threaded
Weight	1 kg
Dust/Water Rating	IP67
GX-55 Control Box	
Supply Voltage	9 to 32 VDC
Ports	2x USB Ethernet RS-232 2x CANBus 2x Digital inputs
Display Panel	640x480 Color VGA, enhanced brightness with analog touchscreen
Operating System	Windows® CE
Operating Temp	-40°C to 70°C
Weight	1.26 kg with backpack 1 kg without backpack
MC-R3 Receiver	
Supply Voltage	10 to 30 VDC
GNSS	GPS, GLONASS, SBAS
Channels	144
Radio	GSM/CDMA/HSPA 915SS Digital UHFII
Ports	RS-485 RS-232 GMU 2x GNSS 2x Millimeter GPS External modem 2x CAN 2x Ethernet I2C for Smart Knob™ SIM Card (optional)
Shock	50 G 11 ms 1/2 sine wave each axis
Dust/Water Rating	IP66



Rapid blade response technology

Built tough for any environment, the MC²⁺ IMU sensors mounted on the body and blade deliver update rates to the system keeping the blade on grade at high speeds.



Intuitive control box

The robust design of the GX-55 control box is delivered in a lightweight, compact aluminum housing – complete with integrated LED light bars, a graphical interface and fast data processor.



Versatile motion control interface

The MC-R3 is an interchangeable receiver with integrated boards for GNSS, radio, and controller to receive RTK corrections as well as drive valves of the machine.



Fence Antenna™ technology

Conveniently mounted on the cab of the machine, the MC-G3 antenna captures all available GNSS satellite signals while identifying and rejecting signal noise – for ultimate grade control.



For more information:
topconpositioning.com/3dmcmax

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