





Shatter the 3D Automation Production Barrier – Speed

- Increase speeds up to 200% over existing 3D systems
- Smoothness and grading accuracy comparable to motor graders
- Same easy-to-use interface as previous Topcon machine automation systems
- Unmatched productivity that you will have to see to believe

Traditional finish grading with a dozer took multiple passes at slower speeds. Existing 3D-GPS machine control allowed operators to double their production. 3D-MC² uses revolutionary technology to reach an unbelievable new level of performance: four times faster than a standard dozer, two times faster than any 3D dozer. One dozer doing the work of two 3D dozers; think of the money you will save.

More efficient use of your machine

3D-MC² will drastically change the role your dozer plays on a typical job site, in some cases it may even replace the need for a motor grader. It also means more efficient use of your dozer. Not only does speed increase, but fewer passes are needed, so more work can be done in less time. That means less machine operating time translating into less fuel, less wear on a machine and most importantly, more time that can be spent working in other areas or job sites.

Improved operator performance

3D-MC² is built on our same easy to use interface so your operators will have no problem putting it to work right away. With the advancements of 3D-MC², less experienced operators will be able to compete with the most skilled operators. More for less, what could be better.

How it works

3D-MC² utilizes the GX-55 control box, GNSS antenna, MC-R3 receiver, a single MC² sensor and intuitive software to deliver position updates 100 times per second. The MC² sensor combines a gyro, compass and inertial sensor to measure the X, Y and Z position as well as the roll, pitch, yaw and acceleration of the dozer. 3D-MC² is uniquely configured to deliver stability and control at any moment.



The Topcon 3D-MC² Advantage

Fine grading with a dozer has been typically done in first gear. Not anymore. Now you can move more material at higher speeds and at a tighter accuracy with one machine. That's the Topcon advantage.



GNSS antenna

Radio antenna

MC-R3 receiver

Hydraulic valve

GX-55 control box

IMU sensor

MC ² IMU	
Supply Voltage	9 to 32 VDC
Power Input	0.21 A Max at 12v 0.11 A Max at 24v
Housing	Powder coated cast aluminum
Weight	1 kg
Operating Temp	-20°C to 60°C
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



Graphical User Interface

- Windows CE®
- Touch screen interface
- Internal battery provides functionality away from the machine
- Integrated LED lightbar



Rugged Design

- G3 tracking technology
- Rugged housing design to work on any machine
- Lightweight



Communications Receiver

- Network capable receiver with GSM / CDMA
- UHF and Spread Spectrum radio options
- LED indicators for satellite tracking and controller status



Sensor Features

- Rugged housing for OEM and aftermarket installations
- 100 Hz position update rate
- All electronic sensors for positioning calculations



For more information:
topconpositioning.com/3dmc2

Specifications subject to change without notice.
©2016 Topcon Corporation All rights reserved.
7010-2015 G 3/16

