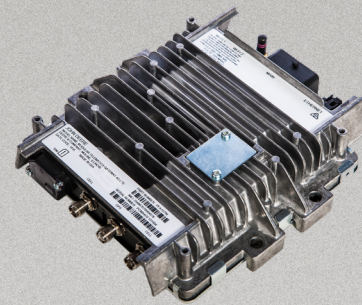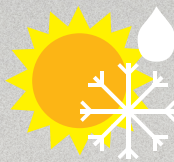# MTG 4G LTE

The Modular Telematics Gateway integrates GNSS, mobile connectivity and on-board machine communications via CAN, Ethernet, and RS-232. It's ideally suited for advanced telematics applications such as machine health monitoring, advanced logistics, and remote diagnostics.

Storage: 8GB onboard flash

Designed and tested to extreme environments

Supports LTE with fallback to 3G and 2G cellular communication

Supports 12V and 24V systems

yocto PROJECT

Open source created with Yocto Project® software*

Supports multiple SIM options:
- Internal soldered SIM IC
- External accessible Micro-SIM
- Combination of internal and external SIM

Wireless and Bluetooth® communication

Certified in over 70 countries

*Linux® and Yocto Project® are registered trademarks of the Linux Foundation. Linux® is a registered trademark of Linux Benedict Torvalds.

MTG 4G LTE Specifications

Processor / OS

1.33 GHz Intel® Atom™ CPU

Real-Time clock

Custom Embedded Linux® OS created via Yocto Project®

Software

Operating System: Yocto Linux Distribution

Extensible Yocto SDK

Bootloader: U-Boot

An implementation review is recommended to verify compatibility to planned use cases

Memory

RAM: 1GB DDR3

Flash: 8GB e-MMC

Diagnostic Tools

Integrated Status LED

Internal diagnostics available

Mechanical

Metallic IP67 enclosure

Device-side connectors

  Header: Molex CMC 48-way

  Ethernet: 12 pin HSAutolink™ II

  Cell antennas (2): 50 ohm female TNC

  GNSS antenna: 50 ohm female RP-TNC

  Wi-Fi 1 antenna: 50 ohm SMA

  Wi-Fi 2 antenna: 50 ohm Reverse Polarity SMA

Dimensions: 215 x 205 x 51 (mm)

Weight: 1.45 kg (3.2 lbs.)

Environmental

-40°C to +75°C operating

Vibration: 10.6 Grms, 10 Hz–2 kHz

Shock: 85G

Humidity: 40°C @ 95% RH

Dust, particle impact, immersion, and high-pressure 5000 psi spray tested

Communications

Cellular and GNSS modem

  North American Modem

    Quad Band LTE: 700/850/AWS (1700/2100)/1900 MHz

    FDD-Band (17,5,4,2)

    Tri Band UMTS (WCDMA): 850/AWS (1700/2100)/1900 MHz

    FDD-Band (5,4,2)

    Quad Band GSM/GPRS/EDGE: 850/900/1800/1900 MHz

    European plus others

    Penta Band LTE: 800/900/1800/2100/2600 MHz

    FDD-Band (20,8,3,7,1)

    Tri Band UMTS (WCDMA): 900/1800/2100 MHz

    FDD-Band (8,3,1)

    Dual Band GSM/GPRS/EDGE: 900/1800 MHz

    Internal soldered SIM IC

    External accessible Micro-Sim Card (optional)

Wireless and Bluetooth®

  2.4 & 5 GHz w/ MIMO

  Supports IEEE 802.11 a/b/g/n

  Bluetooth® 4.0 BLE

Electrical Safeguards

Transient protection per Industry Standard

ESD Protection

  8 kV contact, 25 kV air discharge

Short to battery/ground protection on all primary connector pins

Reverse battery, load dump, jump start protection

Regulatory

US / Canada: FCC (tested to Part 15b), PTCRB, AT&T certification, Industry Canada

Europe: CE, E mark

Australia/New Zealand

Extensive list of additional country approvals

Contact us at ElectronicSolutions@JohnDeere.com

JOHN DEERE