



KEY FEATURES & BENEFITS

- GPRS modem for worldwide coverage
- Reliable, proven GPS technology from Trimble
- Optional sensors for monitoring a variety of different tasks
- Onboard geofencing
- Real-time alerts
- Optional two-way messaging
- Theft recovery

COMPACT, POWERFUL AND IDEAL FOR HEAVY MACHINE ASSETS

The CrossCheck® Global locator is a powerful, versatile asset management device that integrates a GPS receiver with a General Packet Radio Service (GPRS) communication system. Using Internet Protocol (IP), the CrossCheck device allows reliable, fast and efficient two-way transfer of information across a wireless GPRS network.

The CrossCheck Global locator is also an enabling device for Trimble Construction Manager, a software application that monitors key data relating to construction asset activity. When combined with Trimble Construction Manager, the CrossCheck Global locator provides contractors; construction company owners, managers and supervisors; and construction rental companies with real-time mapping, messaging, reporting and workforce management data that saves both time and money and increases overall worksite productivity and efficiency.

The low profile, compact design of the CrossCheck Global locator makes it simple to install in a discrete location on a construction asset. And, because of its two-way communication capabilities and optional, integrated sensors for monitoring things like whether the engine is idle or working, cycle times, load counts, dumps and fuel consumption, the CrossCheck Global locator is the ideal solution for heavy machine assets like dozers, excavators, scrapers and dump trucks.

How It Works

Your assets are equipped with hardware (e.g. the CrossCheck Global locator) containing the latest in GPS technology. That hardware provides immediate location information—even in difficult environments typically found on a construction site.

Internet

The CrossCheck Global locator utilizes innovative GPS technology, an in-built motion sensor, a vehicle adapter module, wireless communications and an Internet-enabled computer to detect, monitor and report on equipment activity.

Three Easy Steps

- 1) The CrossCheck Global locator is installed on the asset, receives position coordinates from the GPS satellites and stores those coordinates in memory.
- 2) The CrossCheck Global locator then wirelessly sends packets of data to the central data server via a cell phone tower.

- 3) Information on the central data server is accessed through the Trimble Construction Manager software. Trimble Construction Manager stores the data (up to 90 days) and conveniently organizes it for the user into asset groups for map views, reports, charts and dashboards. Alerts and events can be set up to notify users of expected (and unexpected) activity.

EXTENSIVE REPORTING CAPABILITIES

The CrossCheck Global locator communicates current status from the asset to the Trimble Construction Manager software platform as often once every minute. Included among the information it transmits is position, speed and direction. This allows you to efficiently manage all of your construction resources.

When combined with Trimble Construction Manager, the CrossCheck Global locator enables services such as dispatching, site runtime utilization, machine maintenance monitoring and stolen asset recovery.

Trimble Construction Manager also allows you to view the location of your CrossCheck Global device-equipped assets at all times, exchange messages and run sophisticated reports summarizing position information and events.

REAL-TIME ALERTS

Through Trimble Construction Manager, the CrossCheck Global locator can send automated alerts in real time for reporting events such as speeding, unexpected movement after hours or travel outside of a specified area. Alerts can also be sent when the asset's next scheduled maintenance is due.

For time-critical applications, construction managers can add the optional EchoLDX Message Terminal to the CrossCheck Global device for delivering conveniently pre-defined messages and responses. The EchoLDX Message Terminal provides the vehicle operator with a quick and easy method to communicate with a dispatch office by sending messages without voice communications. Dispatching service is enhanced by alerting operators of delays and by communicating potential problems immediately.

ONBOARD GEOFENCING

The CrossCheck GPS reporting capabilities include geofencing — a border or “fence” that you draw on a map. The asset is displayed on the map at its precise location at all times. You can also track an asset while it is traveling.



CROSSCHECK GLOBAL LOCATOR

If the asset travels outside of the designated geofence or if movement is detected after hours, an alert is sent. A geofence can be drawn around a certain route or an entire area. This information is stored in the CrossCheck device.

Geofencing is especially useful for managing the arrival and departure of construction assets at a defined jobsite. It can also be used for site efficiency and security purposes, by sending alerts to managers when there is unexpected asset use or unexpected departure from a site. By combining runtime hours and geofencing, managers can see automated reports that show time spent onsite and the distance traveled between sites.

TRACK YOUR PROFITABILITY

Data from the CrossCheck Global device can be exported from Trimble Construction Manager to accounting and project management software

MANAGING YOUR MOBILE RESOURCES

TECHNICAL SPECIFICATIONS

Input Voltage	9.0 – 32.0 VDC GPRS, TNC (receptacle) 50 Ω
Current Consumption (Typical)	Transmitting with MDT: 340 mA (1.6 A peak) at 12 VDC; Transmitting without MDT: 270 mA (1.5 A peak) at 12 VDC; Not transmitting with MDT: 160 mA at 12 VDC; Not transmitting without MDT: 90 mA at 12 VDC; Not transmitting sleep mode: <10 mA at 12 VDC
Inputs & Outputs	Discrete Inputs: (4) switch closures; Ignition Sense Off. <0.8 V; Ignition Sense On. >2.4 V
Message Formats	Trimble proprietary
Status LEDs	GPS (green); GPRS (amber)

CONFIGURABLE PARAMETERS

Geofence area for Job Sites	Over-the-air
Speeding Reports	Enable, speed and duration thresholds
Stop Reports	Enable, speed and duration thresholds
Mileage/Run Time	Set the initial odometer value and engine runtime
Data Logging	Supports message and event storage for up to 1 week while out-of-network coverage
Stop Reports	Enable, speed and duration thresholds
Messaging	Available through Trimble's EchoLIX Message Terminal

PHYSICAL SPECIFICATIONS

Assembly	Top—Injection molded plastic with integrated shield
Size	Maximum—228 mm W x 121 mm D x 36 mm H (8.97 in W x 4.76 in D x 1.42 in H)
Weight	485 g (1 lb, 1.1 oz)
Connectors:	MDT Port, DE-9 (receptacle); Serial Port, EIA-232 RJ-45 (receptacle); Power & Discrete I/O.
Antennas	Molex Micro-Fit 3.0 16-pin dual row locking plug GPS, SMA (receptacle) 50 Ω; GPRS, TNC (receptacle) 50 Ω

for tracking job estimates and individual project profitability. By analyzing the Trimble Construction Manager reports, you can determine if all of your assets are being utilized for maximum profitability and more accurately estimate asset use on future projects.

KEEP A CLOSE EYE ON YOUR EFFICIENCY

In an economy of shrinking budgets and increasing demand for greater worksite efficiencies, the CrossCheck Global locator, together with Trimble Construction Manager software, is simply one of the best solutions on the market today to monitor each and every one of your assets, large and small, on all of your worksites.

GPS SPECIFICATIONS

Receiver	L1 frequency, C/A code (SPS), 8-channel continuous tracking receiver
Update Rate	Once per second maximum
Accuracy, no S/A	Position < 10 meters (50% CEP)
Velocity	< 0.5 meter/second
First acquisition	Cold start < 180 seconds (90%); Warm start < 45 seconds (90%)
Reacquisition after signal loss	< 2 seconds (90%)
Datum	WGS-84

GPRS SPECIFICATIONS

CrossCheck GPRS, Internal GSM/GPRS Module Class B
GPRS Class 10 capable 4 slots Rx, Regulatory Approvals, FCC, PTCRB

ENVIRONMENTAL

Temperature	Operating: 20 °C to 55 °C for 900 MHz (-4 °C to 131 °F); -10 °C to 55 °C for 1900 MHz (14 °F to 131 °F)
Non-Operating	-40 °C to 85 °C (-40 °F to 185 °F)
Humidity	.5% to 95% RH; non-condensing at +40 °C
Vibration	0.008 g ² /Hz, 5 Hz; +3 dB/Octave, 5 Hz to 20 Hz; 0.05 g ² /Hz, 20 Hz to 100 Hz; -3 dB/Octave, 100 Hz to 800 Hz; 0.001 g ² /Hz, 800 Hz to 1000 Hz
Shock	Operational: 40 g for 11 m/sec Non-Operational: 75 g for 6 m/sec
Vehicle transients	ETS 301 489-1; section 9.6 Connectors
Safety	N/A
MTBF	100,000 hours

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