



KEEPING EQUIPMENT WITHIN REACH

APPLICATION NOTE

TURNING GENERATOR DATA INTO PROFIT

GPS and J1939 Remote Monitoring

Capturing J1939 data from your generator can be difficult and time consuming. Turning that data into useful information that reduces your costs or increases your revenue can be a herculean task.



InReach™ puts this valuable data within your reach and delivers it in a way that improves your profitability.

J1939 INFORMATION SAVES YOU MONEY THROUGH:

- Increased maintenance contracts
- Compliance to standards
- Efficient site visits
- Avoiding equipment abuse
- Stronger customer loyalty
- Proactive maintenance
- Remote diagnostics

HOW WE DO IT

InReach is an end-to-end connected asset solution that includes the on-asset hardware, international communications connections, web-based services, and strong 24/7/365 customer support. The InReach solution has evolved from over a decade of telematics industry experience and is fully integrated, so you don't have to worry about anything except running your business. Our core strength is tapping into J1939 equipment data from nearly any machine and knowing how to turn it into useful information for your business. We can show you how we do it today, not sometime in the future, and work with you to customize the J1939 data collection to fit your needs. InReach uses a robust infrastructure for data security and an on-line web center for your tools and automated services. Reports can be delivered to your email box or accessed on-line any time. Our Operations Center is professionally staffed 24/7/365 with Coordinators that understand equipment applications, giving you the peace of mind that you need.

SERVICES

FAULT CODE REPORTS

The Current Fault Code Report gives you critical information you can act on now, while the Historical Fault Code Report gives you a trail of information to follow for failure analysis. Reports can be delivered to your email box or viewed on-line.



MAINTENANCE PLANNER

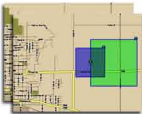
Schedule maintenance, easily record the notes upon completion, link to your own procedures, and send follow up emails with key asset information automatically included.

ALERT NOTIFICATIONS

Receive automated email notifications for alarms, fault codes, or events.

GPS MAPPING WITH GEOFENCES

Know where your asset is, when it moves, and its health...all from the same map view!



ASSET VIEW

A virtual view into your equipment that gives you detailed status of discrete points and analog values.

RUN TIME REPORT

A summary of when the engine ran on the equipment, delivered right to your email box!



KEEPING EQUIPMENT WITHIN REACH

MONITORED EQUIPMENT INFORMATION

J1939 Data Logging

Collected every 15 minutes while running, transmitted on shutdown or day end.

DESCRIPTION	PGN	SPN
Run Hours	65253	247
Engine Oil Pressure	65263	100
Engine Coolant Temp	65262	110
Intake Manifold Temp	65270	105
Air Inlet Pressure	65270	106
Barometric Pressure	65269	108
Percent Load at Current Speed	61443	92
Electrical Potential (voltage)	65271	168
Engine Speed (RPM)	61444	190
Percent Torque	61444	513
Battery Potential Switched	65271	158
Boost Pressure	65270	102
Fuel Rate	65266	183
Total Fuel Used	65257	250
Generator Total Real Power	65029	2452
Generator Total Apparent Power	65029	2460
Generator Total Reactive Power	65028	2456
Generator Overall Power Factor	65028	2464
Generator Overall Power Factor Lagging	65028	2518
Generator Average Line -Line AC RMS Voltage	65030	2440
Generator Average Line Neutral AC RMS Voltage	65030	2444
Generator Average AC Frequency	65030	2436
Generator Average AC RMS Current	65030	2448
Generator Total kW Hours Export	65018	2468
Generator Total kW Hours Import	65018	2469

NOTE: ACTUAL PNG/SPN'S MAY VARY BY EQUIPMENT TYPE

J1939 Diagnostic Faults

(Transmitted on Occurrence)

- J1939 DM1 messages – no filtering
- SPN/FMI display with standard code definitions
- Snapshot data (GPS and run hours) collected on active fault detection
- 30 fault messages per month included

Discrete Points (Transmitted on Occurrence)

- Ignition Switch Status
- Engine Running Status
- CANBus Failure Alarm
- Low Battery Voltage Alarm
- Low Fuel Alarm

Automated Notifications

- Low Battery Voltage
- Geo-fence Violation
- CANBus Failure
- Selected SPN/FMI
- Any other defined alarms

Analog Points

- Battery Voltage
- Any SPN as defined above

M10G TELEMATICS CONTROL UNIT

The M10G telematics control unit (TCU) provides state of the art technology packaged to meet the toughest equipment applications.



COMMUNICATIONS

- Cellular – Quad Band GPRS 850/900 /1850/1900 MHz
- Integrated High Sensitivity GPS Module
- RS232 Serial Port
- CAN Bus Port – J1939 Protocol

POWER

- 9-36 VDC Input, 12/24 V systems

I/O

- 8 Discrete Inputs
- 2 Discrete Outputs (pull to GND)
- 4 Analog Inputs (1 reserved for battery monitor)

ENVIRONMENTAL

- 30 to +85 Deg C
- Nema 4 Enclosure
- SAE J1455 Shock and Vibration

DIMENSIONS AND WEIGHT

- 6.3"x4.8"x1.6" (158x120x40mm)
- 1.25 lbs (0.55kg)

CALL TODAY 952-885-8122 www.ztr.com/inreach.html



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