Advanced Genset Monitoring and Control

The convergence of M2M/IoT technologies and market demand is driving increased adoption of telemetry-based remote monitoring systems for gensets. Demands for greater operational control, cost reductions and regulatory compliance are driving increased need for new solutions to reduce complexity, prevent violations and maintain the integrity of the cold chain in global refrigerated container operations. In an industry challenged by costs, these systems must provide true payback, and with multiple ROI drivers now at work, return on investment is both viable and justifiable.

**End-to-end visibility and control**
ORBCOMM’s powerful cellular and GPS-based genset tracking solution provides real-time location and monitoring of gensets in-transit on road and rail or stationed in container terminals and depots. Combining on-board telematics with cloud software, ORBCOMM helps shipping lines, container services providers and other customers reduce operating and maintenance costs, improve fleet management, boost utilization and mitigate risks associated with managing mission-critical cold chain assets across port and intermodal networks.

**Improved fleet management and asset utilization**
Increased asset utilization reduces the need to purchase or lease more equipment, while improved fleet management and better maintenance control facilitate shorter turn times. ORBCOMM’s cellular/GPS locating solution including geofencing allows for automated gate transactions and visibility over fleet distribution, keeping assets producing revenue and helping avoid downtime from maintenance delays. ORBCOMM tracks genset vital signs to reduce manual testing and indicate whether or not the genset is powering a reefer container which can help mitigate the risk of cargo damage or loss.
Reduced costs and losses
The massive expansion of global cellular data networks, coupled with greatly reduced costs for mobile data usage, has significantly improved the economic viability of remotely monitoring gensets. ORBCOMM offers remote genset monitoring and control to reduce third-party monitoring costs, internal operating costs both at head office and on the ground, fuel theft and costs, maintenance and repair costs, asset loss and theft, insurance claims and repositioning costs through asset visibility.

Food safety compliance
Many countries have strong regulatory guidelines around the transport of food. Telemetry systems offer an effective way to monitor and validate compliance with these regulations. In the USA, for example, the new FDA-sponsored Food Safety Modernization Act (FSMA) requires significantly more management across the cold chain.

Emissions compliance
In various parts of the world, carbon emissions control is becoming a key regulatory issue. For instance, the need for emissions control as defined by the latest California Air Resources Board (CARB) regulations mandates that only compliant equipment can operate in local ports. Monitoring systems based on the ID and model of genset units can ensure that non-compliant gensets do not enter areas where their operation will result in significant fines.

Real-time alerts, reporting and analytics
Automated, fully-customizable alarms and alerts provide immediate notification of all malfunctions, technical issues and other critical concerns to identify priority issues for rapid response, reducing risk of cargo damage and claims. Web-based reporting and data export capabilities provide a wide range of instant on-screen reports and graphical views of vital data with easy export options for a full audit-trail delivering effective asset operations management. ORBCOMM’s cloud-based web application offers instant access via any internet-connected PC, laptop, tablet or mobile phone meaning no investment in local server hosting or mobile data access.

Industry-leading hardware
ORBCOMM is an industry-leading manufacturer of hardware devices with a range of standard and advanced cellular and GPS telemetry device options. Features include compact, rugged designs with embedded cellular and GPS antennas, off-power reporting and motion detection, up to 2000 stored onboard geofences and over-the-air firmware updates with industrial 3G SIMs, as well as fuel, battery, reefer connection, operating hours, engine on/off, and location reporting.

Contact a solutions expert today to learn more: visit www2.orbcomm.com/reefer-genset-monitoring or e-mail sales@orbcomm.com.