Enhanced Communications Options for Gasboy Fleet Systems

Wireless Communication Option

Gasboy is pleased to announce new enhanced communication options for TopKAT™, Series 1000™, FleetKey™, Islander 2™, and CFN systems – as well as a new Ground Loop/Lane Antenna option for the Fuel Point™ system. These enhanced communications options help site owners reduce costs and provide greater efficiency in installation and operations for Gasboy Fleet Systems.

Wireless communication is an option to replace current data wiring from the TopKAT, Series 1000/FleetKey or Islander 2 system to the Gasboy PC package or 3rd party software interface through the serial communication port of a PC.

The basic wireless communication option is made up of 2 kits, the Fuel Island Kit for Fleet Systems and the Base Station Kit for PC-based POS control systems. Additional Fuel Island Kits will be required for each additional fleet system within a single location to communicate with the base station. This option helps reduce installation costs by eliminating the need to break ground, install conduit and run wiring.

LAN Ethernet Option

More and more sites are wired with Local Area Networks (LAN) communication infrastructure to reduce telephone communication costs. The LAN (Ethernet) Communication is an option to convert the serial communication interface to a static IP addressed LAN (Ethernet) based communication from the TopKAT, Series 1000/FleetKey, Islander 2 or CFN systems to the Gasboy PC package.

The LAN Ethernet Option helps reduce costs by eliminating telephone line installation and service costs for new or existing sites with LAN (Ethernet).

Ground Loop/Lane Antenna Option

The Ground Loop – Lane Antenna offers a more durable alternative to the Host Antenna. The receiving antenna is located either on or in the fueling lane, and the vehicle G-ring antenna is installed on the underside of the vehicle.

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Features and Specifications

BENEFITS OF SITE NETWORKING

Easier Remote Access to Gasboy Fleet Systems

With enhanced network communications, any Gasboy Fleet System can be accessed from anywhere else on the local network or even over the Internet. As networks are extended to great lengths using switches, hubs and converters, connectivity becomes available to areas that previously required long dedicated serial cable runs.

Reliable Management Access

Enhanced network communications enables 24-hour-a-day maintenance and monitoring to see that the network is running properly. Networking protocols designed for data delivery ensure that information arrives from node to node. Routed networks provide multiple pathways for data delivery. Managers can better focus on quality of service and tune the network topology as required.

Lower Maintenance Costs

Site networking helps lower costs of installation and operations. With a reliable remote management tool, managers can streamline staffing and troubleshooting requirements to a centralized or automated system. For multiple Gasboy Fleet System sites operating Serial to LAN via modem eliminates monthly telephone line costs.

Direct TCP/IP Configuration

Ethernet
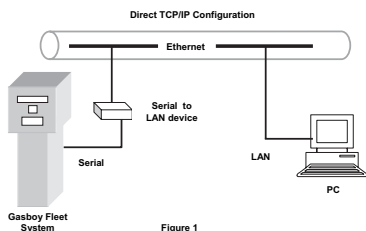Serial to LAN device
Serial
LAN
PC
Gasboy Fleet System
Figure 1

Enhanced communications provide easy network access to the system, with no long cable runs, dedicated modem or multiple port devices. (See Figure 1)
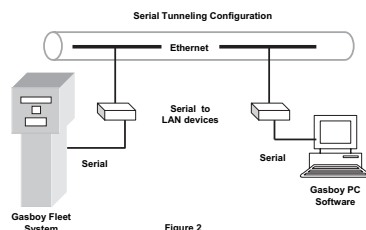
Serial Tunneling Configuration

Ethernet
Serial to LAN devices
Serial
Serial
Gasboy PC Software
Gasboy Fleet System
Figure 2

In a serial "tunneling" configuration, each device passes serial data from one end of the connection to the other, enabling multiple sites to communicate to multiple devices. (See Figure 2)

BENEFITS OF WIRELESS COMMUNICATIONS

Easy Installation and Maintenance

Wireless communications lowers installation costs because it's easier and faster to installed than traditional wired methods. Wireless communications means Gasboy Fleet Systems can be accessed from anywhere without breaking ground or concrete to lay conduit and data wiring. Wireless also means that relocating or adding Gasboy Fleet Systems is easier and faster too. And, no site license is required to operate the FCC approved devices.

Lower Operational Costs

With reliable wireless communications, system components are more easily accessible for faster monitoring and maintenance, without the costs of telephone lines or service fees to operate a radio modem.

Greater Site Flexibility

A wireless radio transceiver and receiver can communicate up to eight miles apart, when located in line of sight. The radio modem operates both point-to-point and multi-point, permitting virtually an unlimited number of remote connections.

Available in Kit Form

Each Gasboy Wireless Communication kit includes the required wireless radio modem and accessories to install on each Fuel Island or Base Station. Additional Fuel Island Kits will be required for each additional fleet system within a single location that communicates with the base station.

Ethernet
Serial to LAN devices in Modem Mode
Serial
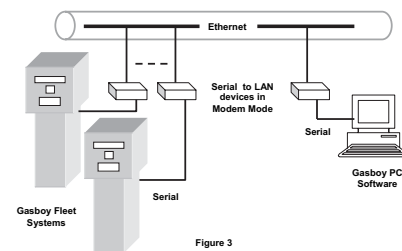Gasboy PC Software
Serial
Gasboy Fleet Systems
Figure 3

When a single PC polls multiple sites, the Serial to LAN device can be configured to operate in a modem mode to access each Gasboy Fleet System. (See Figure 3)

SPECIFICATIONS

Wireless RF Modem

Frequency: 902-928 MHz

Addressing: 65,025 Unique Addresses

Temperature:
Operating: -22° to 158° F (-30° to +70° C)

Range: 2 – 3 miles, based on antenna selection, installation location and other factors. (Contact Gasboy representative for more information)

Regulatory:
FCC (CFR 15.247), Canada IC (RSS210)

Serial to LAN device

Protocol Support:
ARP, UDP, TCP, Telnet, ICMP, SNMP, DHCP, TFTP, and HTTP
Network Interface: RJ45 (10Base-T) Ethernet

Management (Configuration):
Internal HTTP Server
SNMP (read only)
Serial Login
Telnet Login

Indicators (LED):
Good Link (green)
Network transmit/Receive data (yellow)
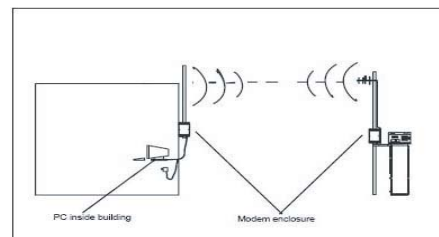Collisions (red)
Diagnostic (red)
Status (green)

Temperature:
Operating: 41° to 122° F (5° to 50° C)
Storage: -40° to 151° F (-40° to 66° C)

Regulatory:
CE, FCC B, TUV, CL, UL

PC inside building
Modem enclosure

A wireless radio transceiver and receiver can communicate up to eight miles apart, when located in line of sight. The radio modem operates both point-to-point and multi-point, permitting virtually an unlimited number of remote connections. (See Site diagram)