# **Hardware Specifications**

## Encoded on the FleetKey:

- Type of key--employee, vehicle, etc.
- System security code
- Key lockout number
- Employee, vehicle, department identification--20 digits, alphanumeric
- Expiration date
- Amount of product allowed
- Type of product allowed
- Required keypad entries--odometer, PIN, etc.
- Previous and last odometer entry
- Required, or optional, reasonable odometer entry
- Number of odometer retries allowed
- Minimum and maximum miles for Reasonable Odometer
- · Vehicle class
- Odometers and dates of last maintenance for three maintenance types
- Encrypted PIN (Personal Identification Number)

User Capacity: Up to 100,000 Memory Capacity: Up to 847 transactions

**Key Configuration:** One or two key system

**User Identification Data:** up to 20 digits alphanumeric (up to eight fields- employee, vehicle, dept., etc.)

## Pump Control:

- Simultaneously controls up to eight hoses
- Can activate/deactivate a pump for one transaction via the terminal
- Can enable/disable a pump via terminal
- Two loadable no-pulse timeouts per pump
- Automatic disable of pump after loadable number of consecutive no quantity transactions
- Automatic site shutdown at specified time

## **Key Lockout:**

- By five-digit key number, 10,000 lockouts standard, expandable in blocks of 10,000
- Individual, string, or range loading
- Positive or negative file

## **Transaction Printing:**

- Direct printout of transactions as they occur
- Sort and subsort by any transaction heading, with dollars and gallon/litre totals
- Compacted format for sending transactions to a computer

## Inventory & Pump Totals:

- Maintains book inventory with loadable reorder point for up to eight tanks
- Maintains up to eight resettable pump totalizers

## Security:

- Loadable sign-on password for command mode
- Loadable system identification
- Personal Identification Number (PIN) entry with optional automatic lockout after three consecutive bad entries

## **Product Authorization:**

Controls access to product type. Nine loadable authorization codes, keyencoded.

#### **Product Limitation:**

Limits the amount of fuel dispensed in a transaction. Ten loadable limit codes, key-encoded.

## Reasonable Odometer:

Provides an odometer validity check. Calculates MPG for each transaction.



Dimensions: System head - 15" W x 12" H x 20" D (38cm x 30cm x 51 cm) Height with pedestal: 60" (1.52M)

**Power Requirements:** 115VAC + 10%, 47-63Hz, 135 watts maximum, 222 watts with printer.

Environmental Requirements: - 30°C to 50°C (-22 °F to 122 °F); 95% relative humidity, non-condensing. **Hose Control Capacity:** Standard system controls two-hose outlets, expandable in two-hose increments to control a total of eight outlets. Two solid state relays per hose.

**Pulser Capacity:** Dollar (pulse per penny); quantity (1: 1; 10: 1; 100: 1; 250: 1; 500: 1; 1000:1 ratios). Resolution to 0.001 gallon/litre. Pulse rate selection switch sealable by Weights and Measures.

**Data Entry:** One key receptacle standard (two key receptacles optional), membrane keypad with audible feedback, 20-character LCD display. **Lighting:** Fluorescent lighting of system faceplate.

Memory: 40K RAM, battery-backed. Clock: Real-time, battery-backed. Safeguards:

- Missing-Pulse detectors
- Emergency STOP button on system faceplate
- Audible "key left in receptacle" alarm
- Manual System Override switches
- Diagnostics: Built-in hardware and software diagnostics.

**Receipt Printer:** Optional, extra. Installed in pedestal.

Key Life: 10,000 read/write cycles

**Contacts:** 5,000 cycles **Approvals:** FCC and UL listed.

### Communications

**Communication:** two asynchronous ports, either may be RS-232 or RS-422. **Direct Connection:** RS-232 – up to 100 ft; RS-422 – up to 1,500 ft. Baud Rate: Selectable 300, 600, 1200 band

**Phone Communication:** Optional 300/1200 built-in modem, or external modem.

Prices and specifications subject to change without notice.



# FleetKey Fuel Management System

Automated Key System for Unattended Fleet Fuel Management



## Accountability, security, and control for Fleet Systems

- Maximizes accountability, security, and control
- Easy to install and operate
- Configurable key encoding and management options
- Timely management reports

FleetKey provides 24-hour access and control of your fleet, including users, quantity, and product types. The system also reports all fuel usage data, including reasonable odometer check, MPG calculation, maintenance due reminders, and tank gauge interface.

## Unattended fleet management

FleetKey identifies your users and/or vehicles, controls access to your fuel dispensing equipment, and controls the types of fuels and the maximum amount of fuel that can be dispensed.

## Reusable keys

All information is encoded in the rugged ABS plastic key. FleetKey reads from the key and writes back new information, so the latest information travels along with each user or vehicle. More than ten years of normal operation and can be re-encoded for reuse.

## Keys ruggedly designed

Keys are designed to withstand the harshest weather conditions and to stand up to the tough abuse of fleet operations, and to retain data even when the key is exposed to dirt, moisture, chemicals, X-rays, and electrostatic discharge.

#### Simple, secure operations

Messages on the liquid crystal display prompt users step by step through the fueling transaction, such as PIN, odometer, and an auxiliary entry field.

## Single or dual key operation

FleetKey operates as a single or dual key system, or a combination of both. In dual key operation, employee and vehicle information is separated onto different keys to keep track of which driver fueled which vehicle.

## **Optional Receipts**

The receipt printer option lets drivers get receipts for fuel dispensed through the FleetKey System. Extra large paper roll capability allows extended unattended operation.



# Features that Maximize Accountability, Security, and Control

#### Odometer reasonableness built-in

FleetKey helps enforce reasonable odometer entries whether vehicles are fueled at the same or different sites. Each vehicle key you can be coded to require a reasonable odometer entry, number of retries allowed, and the reasonable minimum and maximum mileage between fuelings. You can allow an associate to fuel even if the limit of retries is exceeded, recording the last odometer reading as invalid.

## Quick lockout of lost or stolen keys

Easily validate or invalidate keys in seconds, locally or remotely, via your PC. Validate or invalidate keys individually, in strings, or by ranges.

## Tank gauge connection option

A tank guage interface option enables PC communication through the FleetKey system to a Veeder-Root<sup>®</sup> TLS tank gauge. Only one phone line and modem are necessary to communicate remotely with both devices. Tank monitor connection requires an additional auxiliary communication port on the FleetKey system.

## Encode keys yourself

Use a FleetKey encoder or optional software that allows FleetKeys to be encoded directly by the FleetKey System.

## Multiple Levels of Security

Each of FleetKey is encoded with a system identification code which is unique to your system, preventing other FleetKey users from accessing your system. For additional security, you may require a Personal Identification Number (PIN) to authorize fueling.

### Automatic maintenance reminders

With the maintenance messages option, you have the ability to display maintenance due soon, due now, or overdue messages on the FleetKey display for up to three maintenance types and up to 20 classes of vehicles. You also specify when the due soon and overdue messages appear. For strict enforcement, you even have the option to lock out overdue vehicles from fueling.

Product Authorization and Limitation

FleetKey controls which products can be accessed, preventing vehicles from being fueled with the wrong product. FleetKey also controls the amount of product which can be dispensed in each transaction--a safeguard against theft or environmental damage should someone drive away with the nozzle still in the tank.

## Easy to install

The system microprocessor and pump controls are all located in the island unit, minimizing wiring runs. All connections are clearly marked, and terminal blocks are provided for easy, reliable field wiring. Solid state pump control relays and manual override switches are limited to 100 feet. RS-422 cables can run up to 1500 feet.

## **Full Service Support**

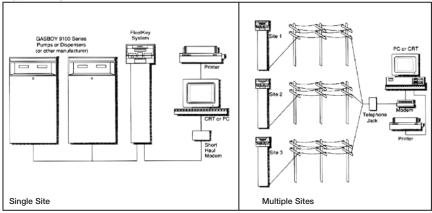
Your FleetKey System is backed by the most comprehensive support available in the industry. Multiple levels of support ensure troublefree service. Each FleetKey System comes with a complete set of installation, operation, encoding, and diagnostic manuals. Our toll-free Help Desk is available for immediate answers to technical questions. Help is also available from Authorized Gasboy Service Representatives.

# PC/Fleet Maintenance System Modules

PC/Fuel system schedules maintenance based on mileage, fuel consumption, and time period. Includes history, invoicing, and parts inventory. Handles multiple maintenance locations.

**PC/Invoicing System -** Enables you to set up account addresses, status,

Typical Configurations



## Easy to maintain

All FleetKey Systems are thoroughly tested and checked. Diagnostic LEDs and test modes aid troubleshooting. You can replace parts yourself, or call a service provider.



billing periods, credit limits, discounts, taxes, drivers, and vehicles. Add product names and invoice messages. Provides monthly account and product usage; reports comprehensive invoice summaries, provides aging summary.

PC /FleetKey Manager Plus<sup>TM</sup> Database software for administration
of FleetKeys. Interfaces with KE200
key encoder for encoding keys directly
from PC. Polls KE200 for maintenance
transactions and automatic update
of vehicle database. Includes PC/
Communications features.

# **Configurable Management Options**

Optional management features allow you to customize the FleetKey system to your requirements. These options are available at no charge with the system order. However, software options will affect transaction storage, and all combinations of options will not fit into a system.

**MPG History:** Calculates and maintains miles-per-gallon tallies for a set number of your vehicles.

Fuel Allocation: Allocates

predetermined amounts of fuel to users. **Manual Entry:** Additional field that is manually entered via the FleetKey System keypad.

Manual Entry Lockout: Restrict system access by locking out the manual entry in addition to key number

**Multi-Level Password:** Two levels of password access.

**Supervisor Key:** Use a specially encoded supervisor key to manually enter key information at the FleetKey System keypad.

**Off-site Fueling:** Enter transactions at the data terminal for vehicles that have fueled off site or when the system was in manual.

Maintenance Messages: Set up and enforce a vehicle maintenance timetable for up to three types of scheduled maintenance. Displays maintenance due messages on FleetKey System display.

## Delivery and Dipstick Key Option:

Accept and record fuel delivery and dipstick reading data using special keys at the FleetKey.

#### Tank Monitor Interface:

Communicate with a Veeder-Root TLS 250/350 tank gauge using the FleetKey System as an interface. Requires C05920 auxiliary communication port.

**AP with Data Entries:** Enter key data and an odometer reading when remotely activating a pump via the data terminal.

**Loadable Base Pump:** Assign different sequential pump numbers at sites having more than one FleetKey System.

**Encoding:** Encode FleetKeys directly at the island reader.

**Extended Pump Timeouts:** Extend the standard maximum timeout from 180 seconds to 3600 seconds (one hour).

**Gate Controller:** Use a dedicated FleetKey System to control a gate.

**Hours:** Prompts for hour meter reading instead of odometer.

**Pump Switch Timer:** Prevents fueling at a pump when the handle has been left on from a previous transaction.

# **Timely Management Reports**

Transaction information may be printed at the time of transaction, providing an up-to-the-minute hard copy that includes transaction number, user and vehicle identification, date, time, pump inventory, pump totalizer, valid/invalid users, and site status.

Reports may be printed locally at the site, or remotely via the optional telephone modern. Stored transaction data can be printed in a variety of formats to meet your specific information requirements.

# Gasboy PC/1000 Software for Windows®

PC/1000 Software enables communication between your PC and your Gasboy 1000 or FleetKey Fuel Management Systems at one or multiple fueling sites. Communication is accomplished through direct hard wiring from the PC comm port to the Series 1000 system, or through dial-up modem. The single desktop application is compatible with Microsoft<sup>®</sup> Windows 95, 98, 2000, ME, or NT 4.0 operating systems.

#### Transaction Report with Maintenance Messages

TRAN KEY1 0022 09381							QUANTITY 11.71					Α	OVER
0043 09381		234 3344	09/18/00	18:40	01	01	9.64	0036164	188	19.5	MAINT	Α	OVER
TOT GALS:													
0024 08236		876 1235	09/14/91	21:00	02	01	33.25	0030050	178	9.3	MAINT	В	NOM
TOT GALS:	33.250												

#### **Pump Data Report**

*PP						
P#	TANK	FUEL #	FUEL NAME	PRICE	GALLONS	
1	1	01	REGULAR	\$1.189	215769.020	
2	2	02	UNLEADED		66544.300	
3	3	03	DIESEL		1223.300	

## **Inventory Report**

\*TI
TANK #1 INVENTORY: 1236.000 REORDER 2000
TANK #2 INVENTORY: 9119.646 REORDER 2000
TANK #3 INVENTORY: 3913.536 REORDER 2000
\*

#### Invalid User Report

\*PI INVALID LIST 00000 00016 00017 00018 00019 00020 00021 00022 00023 00024 00025 00026 00027 00028 00029 00030 00031 00032 00033 00034 \*

## **Exports Data for Reports**

Export fueling data to your reporting package of choice, or select a format compatible with Microsoft Access or Excel.

# Automatically Polls Sites and Stores Data

Automatically polls fueling sites up to three times per 24 hour period, or on demand

# Download Fuel Site Access Changes

Centralize the changing of authorized drivers or other lockout fields and automatically download to your Series 1000 or FleetKey sites.

## **Automatically Configure Sites**

After setting the base parameters to establish communications, the auto-configuration feature matches the set-up of your Series 1000 or FleetKey system by exchanging data with the sites.