# 8620 Driver Entry Terminal

Field interface device for data entry and process management at facility control points



## Highlights

- Designed for security, asset protection, and process control applications in tank farms, terminals, or refineries.
- Interfaces with third-party devices such as electronic presets, PLCs, and I/O devices.
- User friendly interface (Microsoft Windows® Based) provides on-screen step-by-step instructions for your specific business processes
- FIPS-201 compliant biometric card reader* supports multiple card technologies – allowing seamless transition to the latest iCLASS Smart Cards. Provides configurable audible and visual feedback to the user.
- FIPS-201 compliant high resolution fingerprint scanner*
- Supports TWIC data requirements
- Suitable for installation and use in hazardous areas – FM approved
- Suitable for harsh environments – NEMA 4
- Robust construction is highly resistant to hard use, abuse and vandalism
- AC or DC operated

*Optional Component

## Applications

The 8620 Driver Entry Terminal (DET) is a field interface device designed for data entry and process management at facility control points, such as;

- Entry and exit gates
- Load racks
- BOL request stations
- Weight scale stations
- Preload stations

It features multiple interface components, such as a display, card reader, and fingerprint scanner that can be used to enter and record pertinent information about the operator or operation.

The 8620 DET interfaces to FuelsManager® Oil and Gas Terminal Automation Edition software. It captures data and provides user prompts or notifications based on the desired configuration. For example, it may capture driver ID for access control, truck ID for equipment safety, or provide notifications to drivers, such as product availability in a given load rack.

Once authorization of the current process is received from FuelsManager the 8620 DET sends I/O Commands to connected devices, such as Gates, Presets or PLCs.

# Example Operations

### Entry and Exit Gates

The 8620 DET can be used to control access to a facility using card readers, fingerprint scanners, or ID entry via the keypad. It communicates with FuelsManager® Oil and Gas Terminal Automation Edition software to verify ID data and then automatically open/close entry and exit gates. It can be installed for driver or pedestrian ease of use. When used for ID verification at a BOL station it is able to automatically initiate printing of the desired BOL.

### Preload Station

When used as a preload station the 8620 DET can streamline terminal loading operations by reducing time spent at the load rack. A driver may enter load information and verify load data, such as product availability, compartments, allocations, a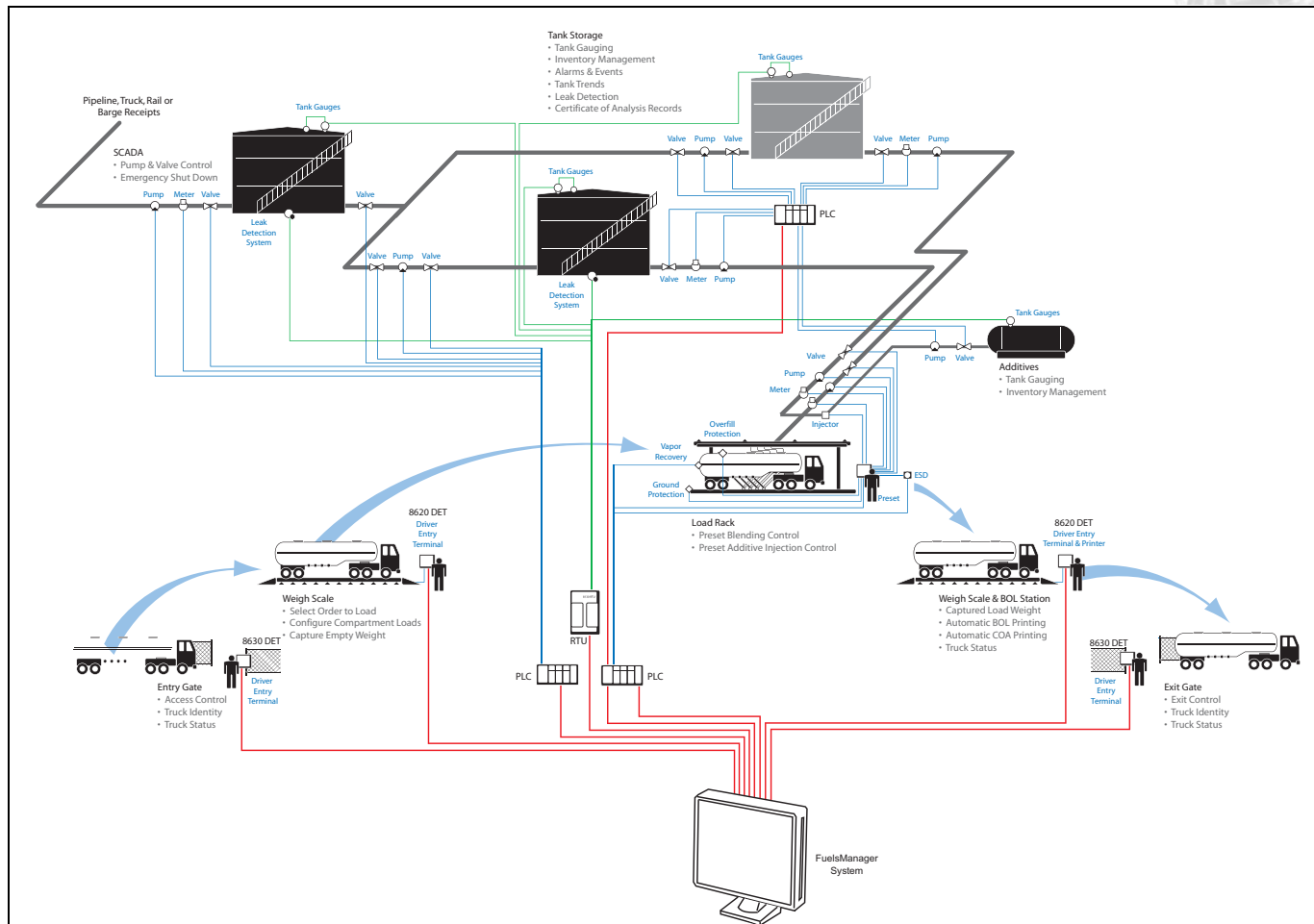nd customer information before entering the load rack. FuelsManager is able to provide notifications to the driver via the 8620 DET, such as "No Mid-grade Available on Bay 4". Once the load data is verified by FuelsManager, the driver is authorized to proceed to the Load Rack and load via the preset.

### Loading Bay

The 8620 DET receives driver command prompts and notifications from FuelsManager. The driver follows the on-screen prompts to configure the desired load information. Once complete, the driver is then authorized to load using the Preset Controller. The combination of FuelsManager and the 8620 DET at the load rack provides a terminal operator with a wide range of options for controlling and verifying load configuration, driver notifications, and blend recipes.

### Weigh Scale

Similar to a preload station, the 8620 can be integrated with weigh scale operations. A driver follows on-screen prompts to capture weights and load information before and after loading.



*Example terminal operations diagram*

# Technical Specifications

## Data Transmission

| Communication Ports | Ethernet (2) and/or serial (4) |
|---|---|
| Communication Types | Com 1, Com 2, Com 4: RS-232 <br> Com 2: RS-485/422 or RS-232 |
| I/O | Supports up to four General Purpose I/O via standard I/O modules. |

## Environmental

| Operating Temperature | -40 °F to +158 °F (-40 °C to +70 °C) |
|---|---|
| Humidity | 5 to 95% (non-condensing) |

## Power Supply

| Operating Voltage | 100 – 240 VAC 50/60 Hz <br> 24 – 48 VDC |
|---|---|
| Power Consumption DC | 1A @ 24VDC |
| Power Consumption AC | 175mA @ 110VAC |

## Enclosure

| Display | High contrast color TFT LCD |
|---|---|
| Keyboard | Engraved keys resist wear and provide operational life of over 4 million cycles per key |
| Enclosure Type | NEMA 4 with fingerprint scanner <br> NEMA 4x without fingerprint scanner |
| Material | Stainless steel (1/16") (1.5875 mm |
| Mounting | Wall mounted |
| Weight | 30 lbs (13.6 Kg) |

## Certifications and Approvals

| FM Approval (cFMus) <br> – Class I, Division 2 Groups C and D, T4 <br> – Class I, Zone 2, T4 |
|---|

## Optional Fingerprint Scanner

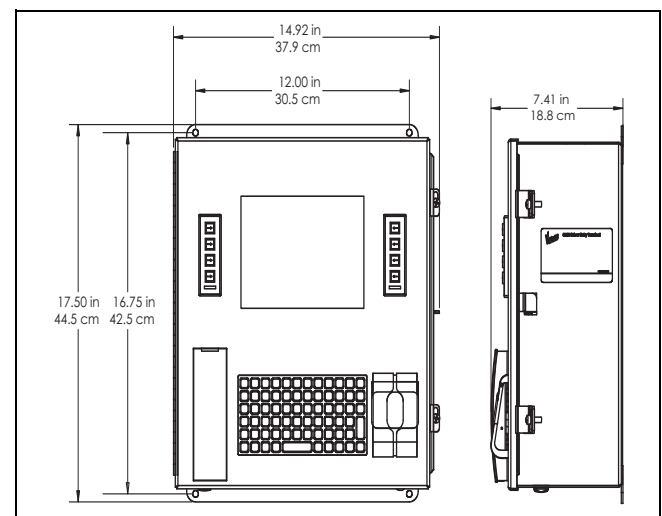| High Resolution | 508 d.p.i <br> 256 x 360 pixels <br> 8 bits grayscale |
|---|---|
| Large Scan Area | 12.8 mm x 12 mm (0.5" x 0.5") |
| Reliable | Solid 1:1 verification and 1:N identification |

## Optional Proximity Card Reader

| Encryption | 64-bit authentication |
|---|---|
| Card-Reader Matching | Unique, non-interchangeable |
| Audio/Visual | – Audio sounder provides various tone sequences to signify access granted, access denied, power up, and diagnostics. <br> – A high-intensity light bar provides a clear visual status indication in red, green or amber, even in bright sunlight. |
| Internal Security | Internal switch notifies user/system of a tamper/vandal attempt |
| Read Range | 1" to 4" (25 mm to 100 mm) depends on card technology used |
| Card Compatibility | 125 kHz Proximity <br> – HID or Indala proximity cards, keyfobs, and tags <br> – AWID Credentials <br> 13.56 MHz contactless smart cards <br> – ISO 15693 – read only; 2k bit (256 Byte), 16k bit (2k Byte) and 32k bit (4k Byte); serial number <br> – ISO 14443A – read only; MIFARE and DESFire® (serial number) <br> – ISO 14443B – read only; 2k bit (256 Byte) and 16k bit (2k Byte) <br> – US Government PIV · FeliCa IDm |
| Data Standards | FIPS-201 supports TWIC requirement |

## Accessories

| · AC-DC 24V 5A DIN rail power supply (part # 400061639) |
|---|

## Dimensional Drawing

## Order Codes

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Approvals** | | | | | | | |
| FM | Factory Mutual Approval (cFMus)<br>Class I, Division 2 Groups C & D, T4, NEMA 4x<br>Class I, Zone 2, T4 | | | | | | |
| | **Power Input/Supply** | | | | | | |
| | 1 | 24 - 48 VDC | | | | | |
| | 2 | 110 - 240 VAC | | | | | |
| | | **Enclosure Heater** | | | | | |
| | | A | None | | | | |
| | | | **Digital I/O** | | | | |
| | | | 0 | Additional Options Not Used | | | |
| | | | 1 | Single Dry Contact Output | | | |
| | | | 2 | Single DC Output | | | |
| | | | 9 | Custom Configuration | | | |
| | | | | **Card Reader** | | | |
| | | | | A | None | | |
| | | | | B | FIPS Compliant Smart Card Reader | | |
| | | | | | **Finger Print Scanner** | | |
| | | | | | 0 | Additional Options Not Used | |
| | | | | | 1 | FIPS Compliant USB Fingerprint Scanner | |
| **N8620–** | | | | | | | Complete Product Designation |

**Note!** The 8620 DET is only compatible with FuelsManager® Oil and Gas Terminal Automation Edition software.