

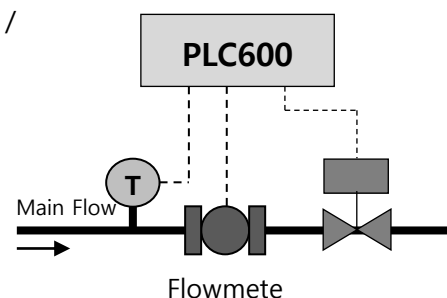
# PLC600 Series

## Petro Loading Counter With Temperature Compensation PLC600 ►►►



### Feature

- Gross, net, weight batch count / gross, net, weight acc. total / gross and net, weight flow rate
- Temperature compensation to API Tables
- gross or net scaled pulse output
- 2-Channel simultaneous loading
- Dual data communication port with protocol matching
- Fully isolated External Input and Output



### Over View

The PLC600 Series batch controllers use temperature correction to calculate the volumetric flow for liquids at standard reference conditions.

The PLC600 Series is ideally suited to custody transfer applications and includes the API/ASTM equations covering general petroleum products and LPG.

The PLC600 Series is direct RTD input or 4-20mA temperature inputs.

# Petro Loading Counter With Temperature Compensation

PLC600 ▶▶▶



## General

### Display

Main : Large 2-line \* 20-character LCD  
With LED B/L  
Sub : Small 2-line \* 20-character LCD  
With LED B/L

**Display Update Rate** 0.25-second

### Decimal Points

Fully programmable for Rate and Total

### Time Base

The Rate can be displayed in unit per second, per minute, per hour or per day

### Data Retention

Set up parameters and totals stored in non-volatile memory with 10 years retention.

### Operation Temperature

-25°C to 60°C

**Power** AC110V / 220V Selectable (50/60Hz)

### Transducer Supply

12V or 24V selectable, 100mA max

## Temperature Input

### RTD Input

Number Of channel 2-Channel  
Type Platinum PT100(DIN)  
Temperature Range

-100°C to +200°C

(Refer to the ordering information for detail)

Accuracy 0.1°C

Linearity The non-linearity of the RTD is internally compensated for.

### Analog Input(4-20mA)

Number Of channel 2-Channel  
Input Impedance 250 ohms  
Measurement Range

-100°C to +200°C

Accuracy 0.05%

## Flow Inputs

### Frequency(Pulse) Input

Number Of channel 2-Channel

Frequency Range 0.5 to 10kHz Max

Signal Type

open collector, reed switch,  
voltage and current pulse

K-factor Range

0.0001 – 50000.0000(the pulse per units)

### Analog Input

Number Of channel 2-Channel

Inputs 4-20mA or 1-5V option

Input Impedance

Current 250 ohms

Voltage 10K ohms

Accuracy 0.05%

Span 0.0001 to 50000.0000

Zero 0.0000 to 50000.0000

Cut-off Point

A low flow rate cut-off can be programmed below which flow is not registered. The cut-off is programmed as a percentage of span relationship  
Linear or square root.

## Digital Input

Channel 6-Channel

### Function

Open collector Input  
For External switch, Earth Device,  
Aux pulse input. etc

**Pulse Width** 10ms (negative going pulse)

**Nominal Input Voltage** 12VDC

**Maximum Input Voltage** 12VDC

## Valve Control Output

### Function

Two stage valve control  
Digital valve control

**Relay Type** AC Solid-State-Relay

**Load Voltage** 90-240VAC

**Max. Current** 1.5 Amps

OR

**Relay Type** Mechanical Contact-Relay

**Load Voltage** 250VAC / 30VDC

**Max. Current** 10A

# Petro Loading Counter With Temperature Compensation

## PLC600 ▶▶▶

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### 4-20mA Output

**Channel** 2-Channel

**Function**

Outputs flow rate in gross volume, net volume, mass. The 4 and 20mA points can be programmed to provide a fully scaled output.

**Resolution** 12-bit.

**Accuracy** Better than 0.025%

**Maximum Load**

500 ohms internally powered. 950 ohms from external 24V dc.

**Isolation** Output is isolated.

### RS232/422/485

**Type**

Both RS232 and RS422/485 are provided.  
(Note : When using the RS422/485, multi drop communication can be implemented with up to 32 instruments connected to a common bus.

**Communication Channel**

2-Channel

**Isolation**

Communication is optical isolation

**Function**

Printer and computer protocols are fully programmable.

**Printer**

A print is initiated on each reset or at a programmable time interval.

**Computer**

An ASCII based protocol enable all display parameters to be read and the totals to be reset.

**Baud Rate** 1200 to 19200 BPS

**Data Bit** 8-bit

**Parity Bit** None

**Time**

A real time clock is provided to give time and date on each output.

### Digital Output

**Function** Open collector output with a pulse produced on each increment of the accumulated total(gross, net, mass or energy).

**Pulse Width** 10ms (negative going pulse)

**Duty Cycle** 49 pulses/sec. Max.

**Channel** 5-Channel

**Output**

Current sinking output transistor 50mA, 30vdc max.(Pulse output is suitable for driving remote counter or PLC's)

### Enclosure

**Explosion Proof**

**Outside Dimension**

270mm (H) x 290mm (W) x 280mm (D)

Notice : H is not fixed

**Mounting Dimension**

90mm (H) x 83mm (W) x M8 Bolt

**Classification**

Division 1, Class I Group-A, B, C, D

Class II Group-E, F & G

Class III

Zone 1 or 2, Exd II B T6

### Application

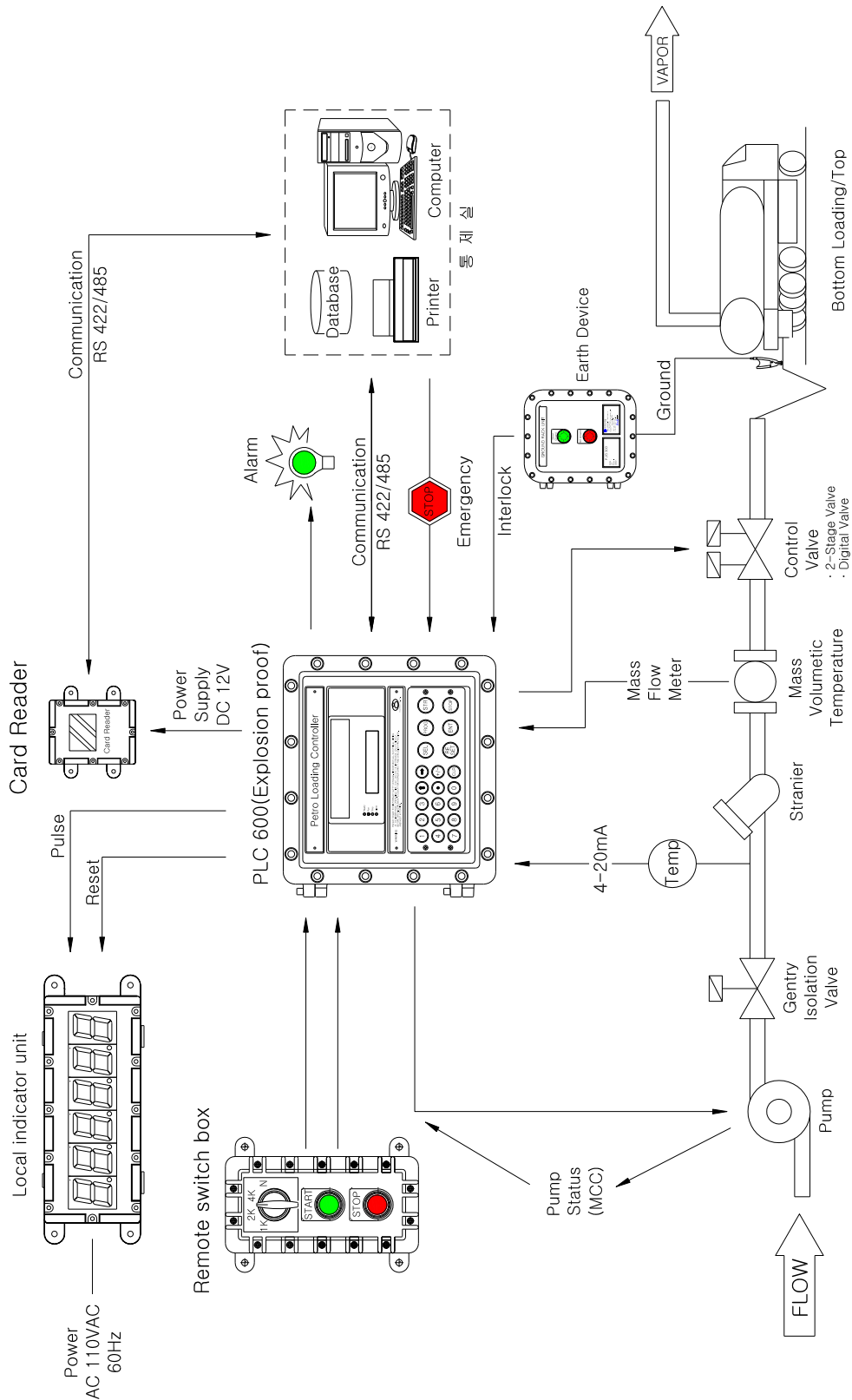
- Truck Loading
- Railcar Loading
- Chemical Loading
- LPG, Lube Oils
- Barge Loading
- Shipping Docks
- Bulk plants

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## System구성 예

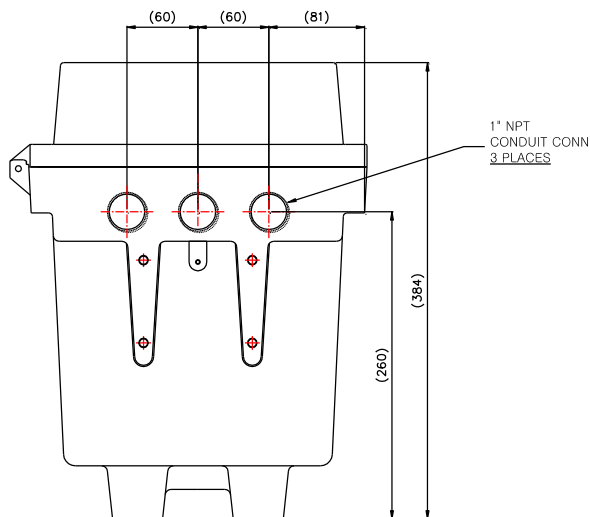
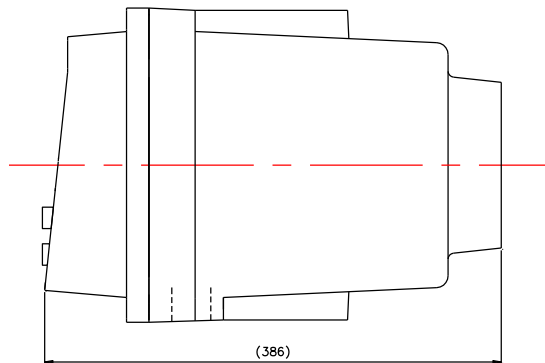
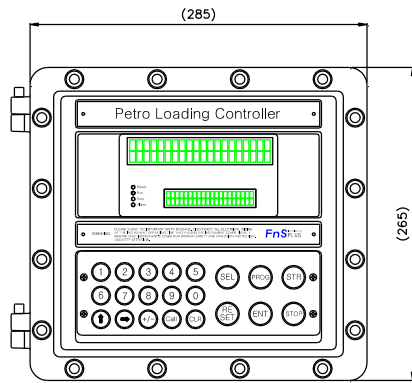


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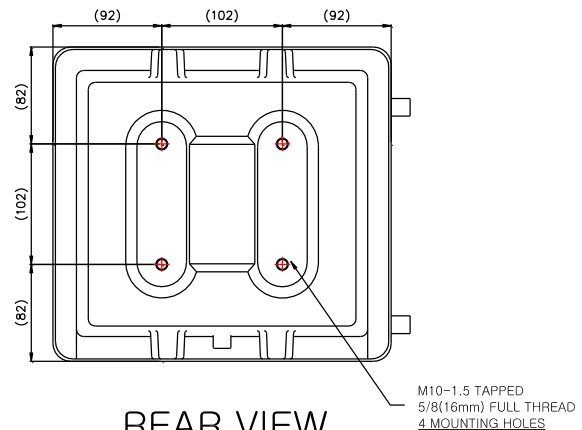
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### Dimension



BOTTOM  
VIEW



REAR VIEW

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PLC600 ▶▶▶



## Ordering

MODEL	Description				
PLC600					Petro loading Counter
Temperature	N A R				No option 4-20mA Analog Temperature Input Pt 100 Ohms RTD Input
Channel		1 2			One arm loading Two arm loading
Analog Output			0 1 2		No option 4-20mA output 1 channel 4-20mA output 2 channel
Case				E	Explosion proof