

# MULTIFUNCTION TOTALIZERS

## With Batch Control

### DPF708/808 Series



- ✓ Modularized Construction
- ✓ Dual 4-Digit LED
- ✓ Output and Alarm Status Indicators
- ✓ Temperature or Pressure Compensation on DPF800 Series

The DPF708/808 Series flow totalizers can accumulate the mass, volume or length of an object, and can provide batch control over the accumulation. The DPF708 Series has a single input available in frequency, voltage or current input models. The DPF808 Series has an additional input that is available in voltage, current or direct temperature sensor input versions. Abundant functions such as retransmission, high/low alarm of momentary flow and abnormal signal detecting. The DPF808 Series also has the ability to trigger alarms for pressure or temperature. Square root function is selectable, 8-digits of accumulation value and 4-digits momentary process value, small signal cut-out can be set at any range.

The DPF808 Series has temperature and pressure compensation used for general gas, saturated steam, superheated steam or liquids. The compensation calculation is done with standard look-up tables for high accuracy in steam measurement applications. Advanced computation algorithms insure accuracy in flow measurements. Used as a batch controller, it has 4-bit accumulator for control and a separate 12-bit accumulator for total sum. With high precision current input models, the totalizer can provide retransmission with 14 bit output resolution and 0.2%FS output precision.



**Accumulation Time:** Fixed at 1 hour for flow accumulation, and the unit can be freely set for batch control.

**Frequency Input Models:** 0 to 3200 Hz, the low level signal is 0 to 1V, the high level signal is 3 to 24V

**Voltage Input Models:** 1 to 5V, 0 to 5V, providing 24 Vdc/24 mA power output

**Current Input Models:** 4 to 20 mA, 0 to 20 mA, 0 to 10 mA

**Temperature Input (DPF808 Series):** K (0 to 999°C), E (0 to 800°C), J (0 to 999°C) RTD Pt100 (-200 to 600°C)

**Pressure Input (DPF808):** 1 to 5 Vdc, 0 to 5 Vdc

**Current Input (DPF808):** 4 to 20 mA, 0 to 20 mA

**Current Output:** 4 to 20 mA

**Relay:** 1A @ 30 Vdc or 260 Vac

**Measurement Accuracy:** ±0.2% FS, for temperature, pressure, frequency, and momentary flow without temperature or pressure compensation

DPF828-R1-R2 ¼ DIN, shown actual size.

#### Temperature/Pressure Compensation Method (DPF808 Series):

**General Gas:** Temperature-pressure compensation (calculated with ideal gas equation)

**Saturated Steam:** Temperature or pressure compensation (calculated with steam tables)

#### Calculation Accuracy for Temperature Pressure Compensation:

The calculation error is <0.3% FS, and after compensation, the overall error is <0.5% FS

#### Accumulation Accuracy:

The error is <0.01% FS

**Power Supply:** 100 to 240 Vac, -15%, +10%/50 to 60Hz; or 24 Vdc/Vac, -15% (optional)

**Power Consumption:** 5 W

**Operating Ambient:** Temperature -10 to 60°C; humidity 90% RH

### SPECIFICATIONS

**Frequency Input:** 0 to 3200 Hz

**Temperature (DPF808 Series):** J, K or E thermocouple, 1 to 5, 0 to 5 Vdc or 4 to 20 mA

**Pressure (DPF808 Series):** 1 to 5, 0 to 5 Vdc or 4 to 20 mA

Size	Front Panel		Cutout		Depth Behind Mounting Surface (mm)
	Width (mm)	Height (mm)	Width (mm)	Height (mm)	
1/8 DIN Vertical	48	96	45	92	100
1/8 DIN Horizontal	96	48	92	45	100
1/4 DIN	96	96	92	92	100



DPF828-DC1-DC2  
1/4 DIN, shown smaller  
than actual size.



DPF738-DC1-DC2  
1/8 DIN, shown smaller  
than actual size.

To Order		
Model Number	Size	Description
<b>DPF708 Series (Single Input)</b>		
DPF718(*)-DC1-DC2	1/4 DIN	Totalizer, 2 DC pulse outputs
DPF718(*)-DC1-R2	1/4 DIN	Totalizer, DC pulse and relay outputs
DPF718(*)-R1-R2	1/4 DIN	Totalizer, 2 relay outputs
DPF728(*)-DC1-DC2	1/4 DIN	Totalizer, 2 DC pulse outputs with bar graph
DPF728(*)-DC1-R2	1/4 DIN	Totalizer, DC pulse and relay outputs with bar graph
DPF728(*)-R1-R2	1/4 DIN	Totalizer, 2 relay outputs with bar graph
DPF738(*)-DC1-DC2	1/8 DIN vertical	Totalizer, 2 DC pulse outputs
DPF738(*)-DC1-R2	1/8 DIN vertical	Totalizer, DC pulse and relay outputs
DPF738(*)-R1-R2	1/8 DIN vertical	Totalizer, 2 relay outputs
DPF748(*)-DC1-DC2	1/8 DIN horizontal	Totalizer, 2 DC pulse outputs
DPF748(*)-DC1-R2	1/8 DIN horizontal	Totalizer, DC pulse and relay outputs
DPF748(*)-R1-R2	1/8 DIN horizontal	Totalizer, 2 relay outputs
<b>DPF808 Series (Dual Inputs)</b>		
DPF818(**)-DC1-DC2	1/4 DIN	Dual input totalizer, 2 DC pulse outputs
DPF818(**)-DC1-R2	1/4 DIN	Dual input totalizer, DC pulse and relay outputs
DPF818(**)-R1-R2	1/4 DIN	Dual input totalizer, 2 relay outputs
DPF828(**)-DC1-DC2	1/4 DIN	Dual input totalizer, 2 DC pulse outputs with bar graph
DPF828(**)-DC1-R2	1/4 DIN	Dual input totalizer, DC pulse and relay outputs with bar graph
DPF828(**)-R1-R2	1/4 DIN	Dual input totalizer, 2 relay outputs with bar graph
DPF838(**)-DC1-DC2	1/8 DIN vertical	Dual input totalizer, 2 DC pulse outputs
DPF838(**)-DC1-R2	1/8 DIN vertical	Dual input totalizer, DC pulse and relay outputs
DPF838(**)-R1-R2	1/8 DIN vertical	Dual input totalizer, 2 relay outputs
DPF848(**)-DC1-DC2	1/8 DIN horizontal	Dual input totalizer, 2 DC pulse outputs
DPF848(**)-DC1-R2	1/8 DIN horizontal	Dual input totalizer, DC pulse and relay outputs
DPF848(**)-R1-R2	1/8 DIN horizontal	Dual input totalizer, 2 relay outputs
<b>Accessories</b>		
DPP-6	1/4 DIN square panel punch	
DPP-5	1/8 DIN panel punch	

Comes complete with mounting hardware and operator's manual.

\* Insert input code: "F" (frequency), "V" (voltage) or "C" (current).

\*\* Insert dual input code: "FT" (frequency/temperature), "FC" (frequency/current), "VT" (voltage/temperature), "VC" (voltage/current), "CT" (current/temperature) or "CC" (current/current).

For models with 24 Vdc power, add suffix "-24V" to the model number, for additional cost.

Ordering Examples: DPF718F-R1-R2, batch controller with frequency input and 2 relay outputs.

DPF818VT-DC1-R2, dual input (voltage/temperature) 1/4 DIN totalizer, DC pulse and relay outputs and DPP-6, 1/4 DIN panel punch.

