

PC-510 & PC-540 Single & Four Channel MFC Readout Power Supply

Features

- ◆ Precision 10-Turn potentiometer mass flow setting
- ◆ Readout of actual mass flow rate SCCM/SLM
- ◆ 3¹/₂ digit bright red LED readout
- ◆ Error alarm indicate
- ◆ Remote analog interface
- ◆ Independent shutoff valve control voltage output
- ◆ Output short circuit protection
- ◆ Full range 90~260Vac input



Description

The PC-510 and PC-540 MFC Readout Power Supply are display and control units for precision gas control in conjunction with MFCs.

The PC-510 is a single channel unit and the PC-540 is a four channel unit. This type readout may directly show gas mass flow rate and readout SCCM or SLM. The flow setting dial on the front pane can precisely adjust a precision 10-Turn potentiometer to insure accurate control. In addition, a warning message Error will be displayed when the actual gas flow rate is sufficiently different from the set point.

The Remote function on the back panel of the PC-510/PC-540 provides a convenient remote control interface allowing users to employ a remote device to directly control the flow without having to go through the front panel.

Besides the flow rate control functions, the PC-510/PC-540 can generate one/four independent +24Vdc output. This output may be used to control external shutoff valve and insure that gas is completely shut off.

Specifications

Model	PC-510 MFC Readout
MFC Control	Single channel Power voltage-- $+15 \pm 0.5\text{Vdc}/300\text{mA}$ max. $-15 \pm 0.5\text{Vdc}/300\text{mA}$ max. Set point output-- 0 to 5Vdc@5mA Flow input-- 0 to 5Vdc Connector-- D-type 9-pin female connector
Display	3 1/2 digit red LED Continuous display of set point, flow input and full scale
Remote	Remote set point input-- 0 to 5Vdc into 100K ohms load Remote flow monitor output-- 0 to 5Vdc@5mA Remote set point enable-- TTL active low Remote gas on-- TTL active low Remote purge-- Dry contact for MFC purge Connector-- D-type 9-pin male connector
Shutoff valve	Single channel Power output-- $+24\text{Vdc}/800\text{mA}$ max.
Power	90 to 260 Vac, 30W 47 to 63Hz
Dimensions	96 × 96 × 222 mm
Weight	1172g
Panel Cutout	1/4DIN cutout (92+0.8mm × 92+0.8mm)

PC-510\Front Panel

PC-510\Rear Panel



Specifications

Model	PC-540 MFC Readout Power Supply
MFC Control	Four channel, independent Voltage output-- $+15 \pm 0.5Vd / 1A$ (total rating of 1 Amp max)- $15 \pm 0.5Vd / 1A$ (total rating of 1 Amp max) Set point output-- 4×0 to 5Vdc@5mA Flow input-- 4×0 to 5Vdc Connector-- $4 \times D$ type 9-pin female connector
Display	4×3 1/2 digit red LED Continuous-- displays of set point ,flow input and full scale
Remote	Independent control for four channel MFC: Remote set point input-- 0 to 5Vdc into 100K ohms load Remote flow monitor output-- 0 to 5Vdc @5mA Remote set point enable-- TTL active low Remote gas on-- TTL active low Remote purge-- Dry contact for MFC purge Connector-- D-type 37-pin female connector
Shutoff valve	Four channel, independent $+24Vdc / 600mA$ (total rating of 2.4 Amp max)
Power	90 to 260 Vac ,10W 47 to 63Hz
Dimensions	$88 \times 485 \times 260mm(H \times W \times D)$ (2U,full rack)
Weight	4150g

PC-540\Front Panel



PC-540\Rear Panel

