

# Compact DC Power Supply PMC-A/PMC Series

Both the PMC and PMC-A Series Deliver High Reliability and Sophisticated Features in a Compact Body Maximum Output Voltage (18V to 500V) 20 Models



# PMC-A/PMC Series

**DC Power Supply (CV/CC)** 

# Basic Standard for the Compact Power Supply

The PMC and PMC-A Series are compact, high-performance, constant voltage, constant current series regulated DC power supplies. The adoption of series regulated design realizes a highly stable output with a low level of output noise. LED digital meter which is legible even in dimly lit location, and electronic switches which eliminate relay chattering, are also featured in this series. In addition, some of the PMC-A Series are equipped with various remote control functions, and when connected with power supply controllers, allow compatibility with GPIB systems.



# Features (PMC-A Series)

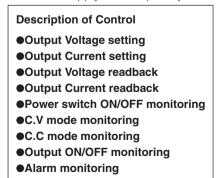
- Simultaneous display of voltage and current values.
- GPIB control by combining with power supply controllers.
- External analog remote control of voltage and current.
- Equipped with output monitoring function (voltage, current, status)
- Front Panel Output ON/OFF switch.
- 10-turn potentiometer for setting of voltage and current.
- Remote sensing function (Only models of which rated output voltage is 18V or 35V)
- Capacity can be expanded by Master-slave parallel operation
- Overvoltage protection (OVP) and overheating protection (OHP) are provided as standard functions.

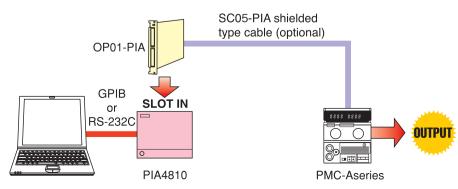
## **Features (PMC Series)**

- Front panel output ON/OFF switch.
- 10-turn potentiometer for setting of voltage (single-turn potentiometer for setting of current)
- Capacity can be expanded by one-control parallel operation
- Overvoltage protection (OVP) and overheating protection (OHP) are provided as standard functions.

## Computer Control (PMC-A series only)

The Power Supply has a capability of Computer Control by using with PIA4800 Series.





## **Specifications**

Model	Output		Ripple		Line Regulation		Load Regulation		Power Source*	Power Consumption	Dimen-	Weight
wodei	CV	CC	CV	cc	CV	cc	cv	CC	AC	Approx.	Sions	Approx.
	V	Α	mVrms	mArms	mV	mA	mV	mA	V±10%	VA	Type	kg
PMC18-1A	0 to 18	0 to 1	0.5	1	1	10	2	5	100	50	- 1	3.5
PMC18-2A	0 to 18	0 to 2	0.5	1	1	10	2	5	100	100	1	4.0
PMC18-3A	0 to 18	0 to 3	0.5	1	1	10	4	5	100	160	I	5.0
PMC18-5A	0 to 18	0 to 5	0.5	2	1	5	5	10	100	230	II	6.0
PMC35-0.5A	0 to 35	0 to 0.5	0.5	1	3	10	3	5	100	50	I	3.5
PMC35-1A	0 to 35	0 to 1	0.5	1	3	10	3	5	100	95	I	4.0
PMC35-2A	0 to 35	0 to 2	0.5	1	3	10	3	5	100	190	I	5.0
PMC35-3A	0 to 35	0 to 3	0.5	1	3	5	4	10	100	240	II	6.0
PMC70-1A	0 to 70	0 to 1	1	1	5	2	5	10	100	150	II	5.5
PMC110-0.6A	0 to 110	0 to 0.6	2	1	7	2	7	5	100	150	II	5.5
PMC160-0.4A	0 to 160	0 to 0.4	3	1	10	2	10	5	100	150	II	5.5
PMC250-0.25A	0 to 250	0 to 0.25	3	1	15	1	15	5	100	150	II	5.5
PMC350-0.2A	0 to 350	0 to 0.2	5	1	25	1	25	5	100	150	II	5.5
PMC500-0.1A	0 to 500	0 to 0.1	10	1	30	1	30	3	100	110	II	5.0
PMC18-2	0 to 18	0 to 2	0.5	1	1	10	2	5	100	100	1	4.0
PMC18-3	0 to 18	0 to 3	0.5	1	1	10	4	5	100	160	1	5.0
PMC18-5	0 to 18	0 to 5	0.5	2	1	5	5	10	100	230	II	6.0
PMC35-1	0 to 35	0 to 1	0.5	1	3	10	3	5	100	95	1	4.0
PMC35-2	0 to 35	0 to 2	0.5	1	3	10	3	5	100	190	1	5.0
PMC35-3	0 to 35	0 to 3	0.5	1	3	5	4	10	100	240	II	6.0

<sup>\*</sup>Power Source: (1)105V to 130V (2)180V to 220V (3)195V to 239V (4) 210V to 250V are available upon request.

Unless otherwise specified, the specifications are based on the following conditions: resistance load, output grounded, remote sensing off, warm-up period of 30 minutes.

■Output Voltage Continuously variable by 10-turn potentiometer

Output voltage temperature coefficient:

100 ppm/°C (typ)

Transient response time: 50µs

100µs:(PMC70-1A,PMC110-0.6A,PMC160-0.4A, PMC250-0.25A,PMC350-0.2A,PMC500-0.1A) Continuously variable by 10-turn potentiometer

(PMC-A series)

Continuously variable by single-turn potentiometer (PMC series)

Output current temperature coefficient:

200 ppm/°C (typ)

■Meter Display (Green LED)

■Output Current

●Output Voltage Display error ±(0.5% rdg +2 digits) at 23°C ±5°C (typ)

Temperature coefficient: 300 ppm/°C (typ)

●Output Current Display error ±(1% rdg +5 digits) at 23°C ±5°C (typ)

Temperature coefficient: 400 ppm/°C (typ)

●Voltmeter Display (Fixed Range)

Rated Output Voltage	Max.Digit Displayed			
18V	19.99			
35V, 70V, 110V, 160V	199.9			
250V, 350V, 500V	999			

#### Ammeter Display (Fixed Range)

Rated Output Ampere	Max.Digit Displayed			
Model less than 1A	0.999			
Model more than 1A	9.99			

■Ground Positive or negative ground

■Ambient Temperature 0 to +40°C (no condensation)

■Ambient Humidity 10 to 80% rh(no condensation)

■Cooling Method Conventional air cooling

■Isolation Voltage Models of which rated output voltage is 18V and

from Ground 35V: ±250V

Other Models: ±500V

■Protection Output overvoltage protection (OVP)

Setting range: 5% to 105% of rating Input fuse / temperature fuse (130°C)

■Functions Output voltage remote control (PMC-A series only) By external voltage: 0 to 10V

By external resistance: 0 to  $10 \text{k}\Omega$ Output current remote control By external voltage: 0 to 10 VBy external resistance: 0 to  $10 \text{k}\Omega$ 

Output ON/OFF control (Output off by external

make contact)

Remote sensing (Only models of which rated

output voltage is 18V and 35V) Remote monitoring function Monitor signal output

V MON (at rated voltage output): 10.0V±0.5V I MON (at rated current output): 10.0V±0.5V

Status signal output

OUT ON / CV /CC /ALM / PWR ON

■Operation Series operation\*1

Parallel operation is available with same

model.\*2

■Dimensions (approx.)

PMC-A Series Type I:107W X 124(134)H X 270(305)Dmm

Type II:107W X 124(134)H X 350(385)Dmm
Type I:107W X 124(134)H X 270(290)Dmm

PMC Series Type I :107W X 124(134)H X 270(290)Dmm
Type II:107W X 124(134)H X 350(370)Dmm

<sup>\*1:</sup>The number of Power Supplies that can be connected in series is limited by the voltage rating with isolation voltage. For example, for 35V type 250/35=7.14...up to seven units can be connected.

<sup>\*2:</sup>The number of Power Supplies that can be connected in parallel is limited up to four units including the master power supply.

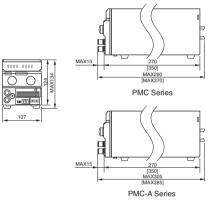


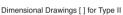


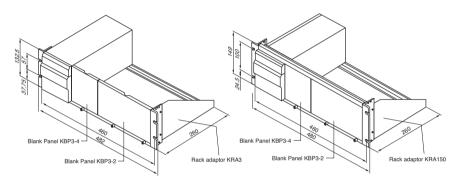
- 1 AC input terminal
- Ground terminal
- 3 Master-slave parallel operation input and output terminals
- 4 Analog remote control terminal (PMC-A Series only)
- 6 AC input fuse holder

# PMC-A/PMC Series External Dimensional Diagrams / Rack Mount Option

#### Unit:mm







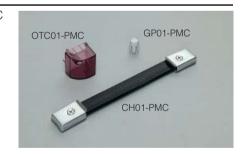
### **Options**

■ Output Terminal Cover ... OTC01-PMC

■ Guard Cap...... GP01-PMC

■ Carrying Handle ...... CH01-PMC

\*The CH01-PMC can be installed on the TYPE II models.



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Printed in Japan

Issue:Oct.2009

200910PDFa