

## C<sup>3</sup>V Series....The World Compact + Accurate 1U Programmable DC Power Supply for Instrumentation and System Integration.

### Description:

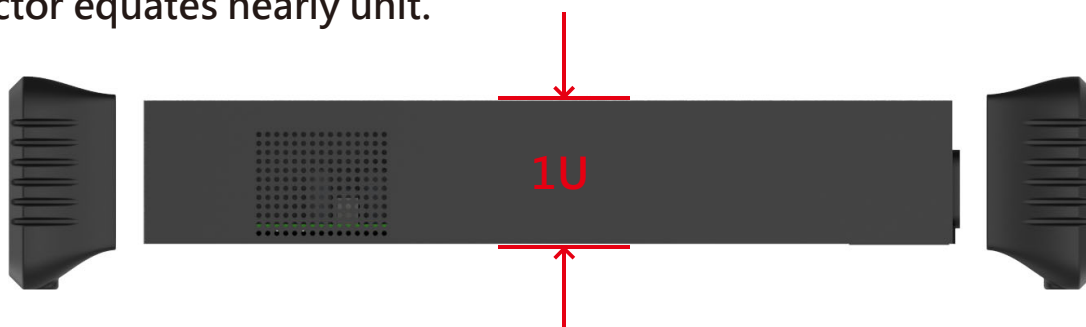
C<sup>3</sup>V Series stand for C.C.C.V.

abbreviated of constant current constant voltage of a high end DC power supply. Technically speaking, they incorporate 1U mechanism, high efficiency power conversion, post linear regulator, accurate measurement, full programmability and diverse communication interfaces. Commercially speaking, they integrate all about the advantages of the Instrumental power supply and industry-oriented power supply on the market. The high efficiency implemented the 1U low profile while the post linear regulation topology and the accurate measure made them suitable on the laboratory uses. The programmability and communication ability are essential to ATE and any application which needs automatic control and data acquisition.



### Features:

- Compact 1Ux100mm design and light weight.
- Post linear regulator topology (LDO) for optimized output.
- Accurate 4-digit measure with voltage tolerance < 0.05%.
- Optional RS232, USB and RS485 interfaces.
- Parallel coms.up to 32 units via RS485.
- Panel calibration system available.
- Perfect for industry automation & remote control.
- Portable, stand alone and in-system versatilities.
- Power factor equates nearly unit.

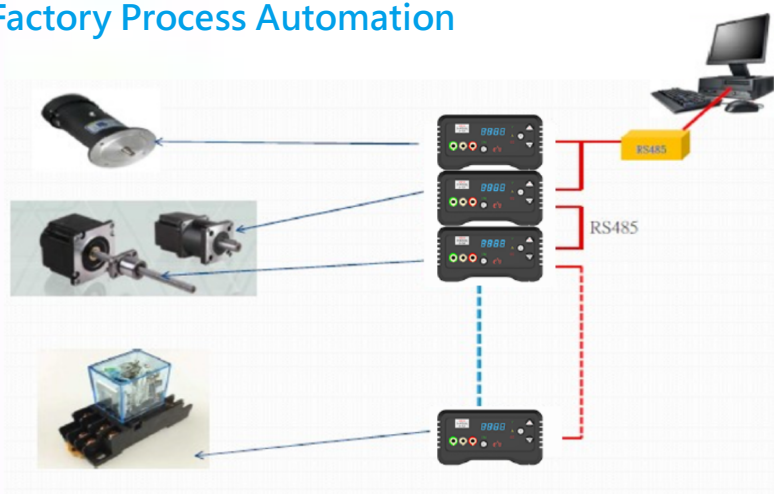


## Applications:

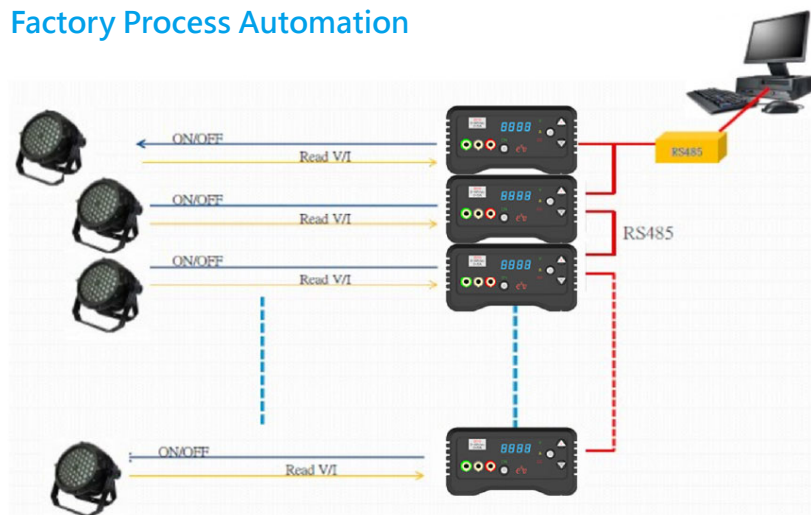
• Personal possession (PP)	• Factory process automation(FA)
• Laboratory uses(LAB)	• Factory automatic test(ATE)
• Education & training(ED)	• Electro- mechanical system(EMS)
• Industrial control(IC)	• Precise battery charger(PCH)
• Lithium battery array charger (LCH)	• Smart home control (SCS)

## Application examples for max. 32 units connection:

### Factory Process Automation



### Factory Process Automation



## Options on front and rear panels:



1	Model No.
2	Banana Post O/P
3	4-digit Display
4	O/P key



5	Enter key
6	UP key
7	Down key
8	Terminal Board O/P



1	IEC Type AC Input
2	Cooling Fan
3	w/o comm
4	USB-B

5	RS-485
6	RS-232
7	Terminal Board AC Input

## How to order C<sup>3</sup>V

Neutral order code :

**C3V-vvii-FT-RT-C**

### options in details

vvii: output ratings

2010: 0~20V, 0~10A

4005: 0~40V, 0~5A

6003: 0~60V, 0~3.5A

FT: Front panel output types

tb : terminal board

bn : banana jack

C: Comm types

N: not applied

U: USB, type B

2: RS-232

5: RS-485

RT: Rear panel AC in types

tb : terminal board

ec: IEC type

For example:

If a "C3V-4005-TB-EC-5 " is ordered,  
the real product will be looking as followed:



## Specification

C <sup>3</sup> V Series	2010	4005	6003
ELECTRIC			
AC input rating			
Voltage	85~264VAC		
Current	2.4A max./115VAC , 1.2A max./230VAC		
Frequency	47~63Hz		
Inrush	22A max./115VAC , 46A max./230VAC		
power factor	PF>0.95/230VAC , PF>0.99/115VAC		
ELECTRONIC			
DC output rating			
Voltage, Volt	0-20.00V	0-40.00V	0-60.00V
Current, Amp	0-9.990A	0-5.000A	0-3.500A
Power, Watt	200W	200W	210W
Line regulation			
CV, mV	<= 10mV	<= 10mV	<= 10mV
CC, mA	<= 5mA	<= 5mA	<= 5mA
Load regulation			
CV, mV	<= 10mV	<= 10mV	<= 10mV
CC, mA	<= 5mA	<= 5mA	<= 5mA
Ripple / Noise (*1)			
CV p-p, mV	<=30mVpp	<=30mVpp	<=30mVpp
CV rms, mV	<= 10mV	<= 10mV	<= 10mV
CC rms, mA	<= 10mA	<= 10mA	<= 10mA

MEASUREMENT			
Panel setting resolution			
Voltage, mV	10mV	10mV	20mV
Current, mA	5mA	2mA	2mA
Programming resolution			
Voltage, mV	10mV	10mV	20mV
Current, mA	5mA	2mA	2mA
Measurement accuracy			
Voltage, %	0.05 % +5 cnt	0.05 % +6 cnt	0.05 % +7 cnt
Current, %	0.2% + 10 cnt	0.1% +8 cnt	0.1% +8 cnt
Temperature coefficient			
Voltage	0.001%/°C	0.001%/°C	0.001%/°C
Current	0.005%/°C	0.005%/°C	0.005%/°C
PROTECTIONS			
OVP	yes	yes	yes
OCP	yes	yes	yes
OTP	yes	yes	yes
COMMUNICATION			
Interface: only 1 option			
RS232	DB9		
RS485	terminal block		
USB	type-B		
Protocol			
Data rate	57600/N/8/1		

NORMS	
EMC EMISSION	EN61000-3-2,-3
EMC IMMUNITY	EN61000-4-2,3,4,5,6,8,1
SAFETY	EN60950-1
ENVIRONMENT	
Operating temp.	0°C~50 °C
R.H., no condensed	20%~85%
Storage temp.	-20°C~70 °C
R.H., no condensed	<90%
PHYSICAL	
Dimensions/Weight	W*D*H = 100mm*250mm*40mm(<1U) / 1.2Kg
<p><b>*1: From output terminals, running a 25cm twisted wire pair terminated with a 0.1uf CC &amp; 10uF</b></p> <p><b>EC, observe voltage across the capacitors under 20 MHz BW at full resistive load.</b></p>	



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