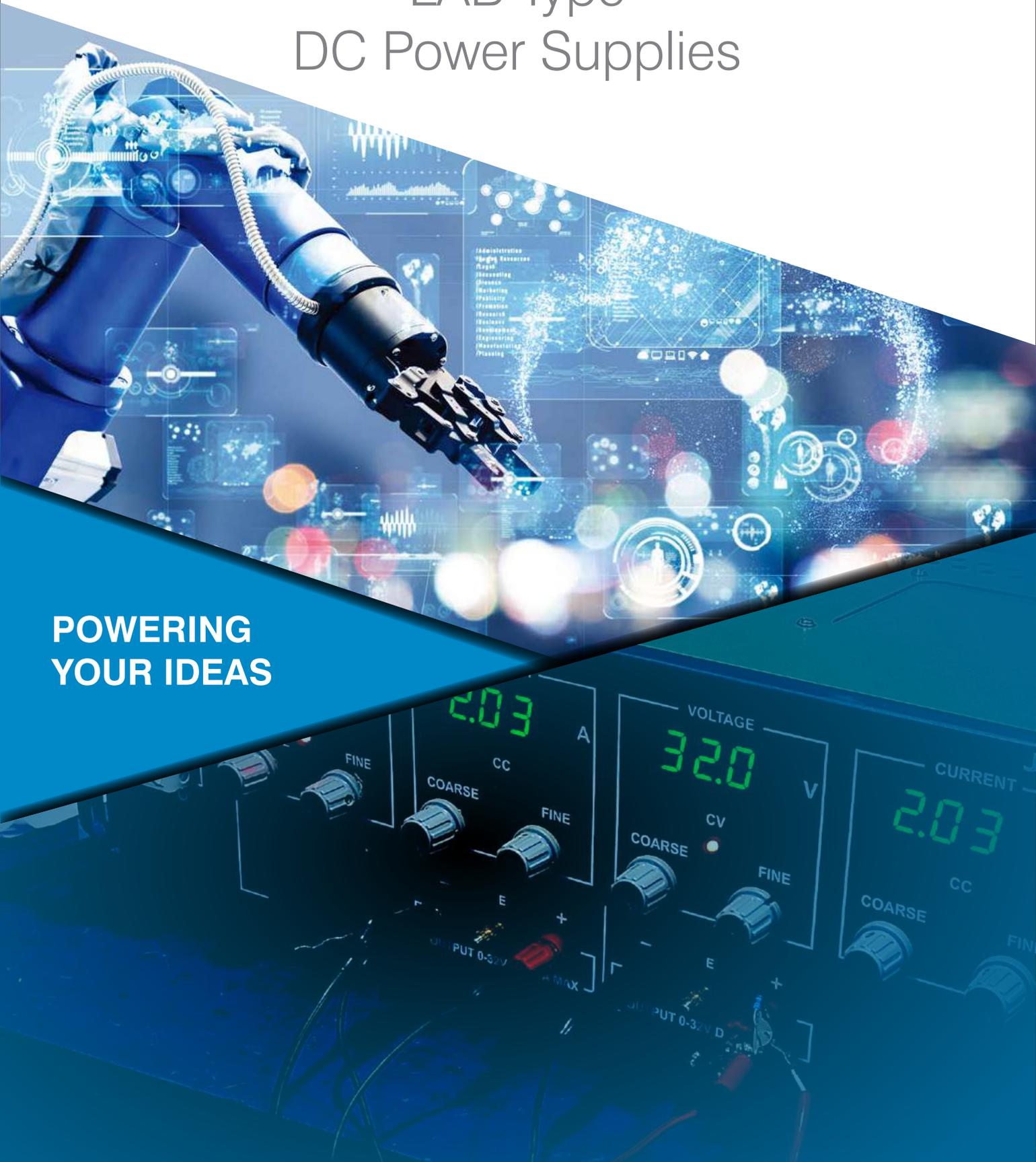


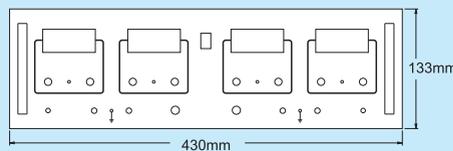
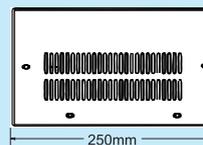
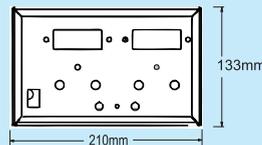


# LAB Type DC Power Supplies

**POWERING  
YOUR IDEAS**



# 30 W - 300 W DC Power Supplies



We offers a range 30 to 300 watts of Linear DC Regulated Power Supplies for use in Laboratories & Industries.

These table top units are designed for 19" Rack Mounting.

There are 15 models to choose from, with output power ranging from 30 watts to 300 watts. Output voltages of 0-16V, 0-32V, 0-64V and 0-128V DC are available for single output supplies. There are four Dual output models with two independent isolated outputs. These outputs could be connected in series or parallel to double the voltage or current.

All the models operate in either constant voltage or constant current mode and are fully protected against continuous output short circuit and overload.

### Special Features at Extra Cost

- 1) 19" Rack mounting only for PS with 430mm width.
- 2) Input 115V AC  $\pm 10\%$

- Optional Interface: RS232 / RS485 / USB
- Proven Reliability and Endurance
- 19" Rack Adaptable - 3U High
- Digital Output Metering 4 Digit DPM
- Constant Voltage/Constant Current Operation
- Remote Sensing Facility for 5A & Above Rating Models
- High Stability and Close Regulation  $\pm 0.01\%$

# 30 W - 300 W DC Power Supplies



## DIGITAL LAB SELECTION GUIDE

SINGLE OUTPUT 30-300W				
OUTPUT	DC OUTPUT		DIMENSIONS W x H x D (mm)	MODEL
	VOLTAGE	CURRENT		
16V	0-16V	0-1A	210 x 133 x 250	VS1601
	0-16V	0-2A	210 x 133 x 250	VS1602
	0-16V	0-6A	430 x 133 x 250	VS1606
	0-16V	0-10A	430 x 133 x 250	VS1610
32V	0-32V	0-1A	210 x 133 x 250	VS3201
	0-32V	0-2A	210 x 133 x 250	VS3202
	0-32V	0-5A	430 x 133 x 250	VS3205
	0-32V	0-10A	430 x 133 x 250	VS3210
64V	0-64V	0-3A	430 x 133 x 250	VS6403
	0-64V	0-5A	430 x 133 x 250	VS6405
128V	0-128V	0-2.5A	430 x 133 x 250	VS1282

## DIGITAL LAB SELECTION GUIDE

DUAL OUTPUT				
OUTPUT	VOLTAGE	CURRENT	DIMENSIONS W x H x D (mm)	MODEL
DUAL	0-32V	0-2A	430 x 133 x 250	VSD3202
	0-32V	0-3A	430 x 133 x 250	VSD3203
	0-16V	0-6A	430 x 133 x 450	VSD1606
	0-64V	0-2A	430 x 133 x 450	VSD6402

Load Regulation to be measured at sense terminals wherever provided.



## SPECIFICATIONS

**Output Voltage & Current :** See Selection Guide.

**Constant Voltage Mode :**  
**Regulation :**

**Line :**  $\pm 0.01\% \pm 2\text{mV}$  for  $\pm 10\%$  change in line output.

**Load :**  $\pm 0.01\% \pm 2\text{mV}$  for load change from zero to full load.

**Ripple & Noise :** 1mV rms max. 20Hz - 20MHz.

**Constant Current Mode :**  
**Regulation :**

**Line :**  $\pm 0.1\% \pm 250\mu\text{A}$  for  $\pm 10\%$  line change.

**Load :**  $\pm 0.1\% \pm 250\mu\text{A}$  for change in output voltage from 0 Volts to maximum output voltage.

**Ripple & Noise :** 0.04% rms.

**Metering :** 3 Digit DPM.

**Meter Accuracy :**  $\pm 3$  counts.

**Mode Indication :** LED indication for constant voltage / constant current operating mode.

**Output Polarity :** Floating w.r.t. ground.

**Overload Protection :** Automatic overload and short circuit protection.

**Transient Response :** 100 $\mu\text{s}$  to within 10mV of set output voltage for load change from 10% to 90%.

**Stability :** Total drift within 8 hours, after warm-up.

$< \pm 0.2\%$  plus 5mV in constant voltage mode.

$< \pm 0.5\%$  plus 5mA in constant current mode with constant line, load and ambient temperature conditions.

**Operating Temperature :** 0-50°C.

**Line Voltage :** 230V AC  $\pm 10\%$  50Hz, single phase.

**NOTE :** REGULATION TO BE MEASURED AT SENSE TERMINALS.

**CUSTOM CAPABILITY :**  
SPECIAL VOLTAGE AND CURRENT RATINGS AVAILABLE ON REQUEST.

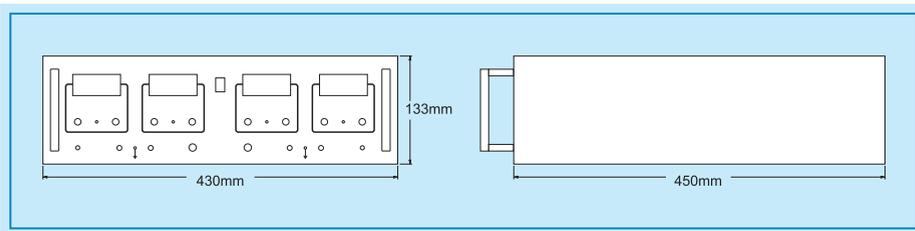
# Dual Output 300W - 2000W DC Power Supplies



- High current density.
- Remote sensing.
- 19" rack adaptable -3U high
- 300W to 2000W different combinations
- Front panel potentiometer to set V&I
- 3 Digit seven segment display for V&I
- High stability and close regulation
- Phase controlled pre-regulation plus linear post regulation

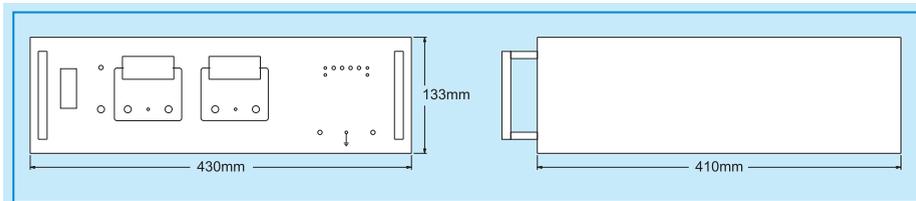
### Special Features at Extra Cost

- Over voltage protection
- 19" rack mounting
- Analogue programming and monitoring for V&I
- Digital meters - 4 digit DPMs
- Optional interface: RS232 / RS485 / USB



MODEL	VSD3205	VSD3210	VSD3220	VSD6405	VSD6410	VSD6420	VSD1282	VSD1285	VSD1288
<b>Input Voltage</b>	230VAC $\pm 10\%$ , 50Hz, 1Phase								
<b>Output Voltage</b>	0 to 32V	0 to 32V	0 to 32V	0 to 64V	0 to 64V	0 to 64V	0 to 128V	0 to 128V	0 to 128V
<b>Output Current</b>	0 to 5A	0 to 10A	0 to 20A	0 to 5A	0 to 10A	0 to 20A	0 to 2.5A	0 to 5A	0 to 8A
<b>Line Regulation CV *</b>	$\leq 0.01\% \pm 2mV$								
<b>Line Regulation CC !</b>	$\leq 0.1\% \pm 2mA$								
<b>Load Regulation CV *</b>	$\leq 0.01\% \pm 2mV$								
<b>Load Regulation CC !!</b>	$\leq 0.1\% \pm 2mA$								
<b>Output Ripple CV (max.)</b>	1mV rms								
<b>Output Ripple CC (max.)</b>	0.05%								
<b>Remote Sensing</b>	Provided								
<b>Operating Temp.</b>	0 to 50°C								
<b>Protection</b>	OL/SC (constant current type)								
<b>Indication (LED)</b>	CV/CC								
<b>3 Digit DPM</b>	V & I								
<b>Meter Accuracy</b>	$\pm 3$ counts								
<b>Input on/off</b>	MCB								
<b>Single Turn Pots Coarse &amp; Fine</b>	V set & I set								
<b>Dimensions appr. **</b>	430W $\times$ 133H $\times$ 450D (mm)								
<b>Weight appr. (Kg)</b>	22.0	22.5	30	22.0	22.5	28	20	20	23

# 300W - 1.2KW DC Power Supplies



## SPECIFICATIONS

**Metering** : 3 digit DPMs for voltage and current measurement.

**Meter Accuracy** :  $\pm 3$  counts.

**Constant Voltage Mode :**

**REGULATION :**

Line :  $\pm 0.01\% \pm 2\text{mV}$  for  $\pm 10\%$  change in line voltage.

Load :  $\pm 0.01\% \pm 2\text{mV}$  for load change from zero to full load.

**Ripple AND Noise** : 1mV rms max. 20Hz to 20MHz.

**Constant Current Mode :**

**REGULATION :**

Line :  $\pm 0.1\% \pm 10\text{mA}$  for  $\pm 10\%$  change in line voltage.

Load :  $\pm 0.1\% \pm 10\text{mA}$  for change in output voltage from 0 volts to maximum output voltage.

**Ripple AND Noise** : 0.04% rms

**Mode Indication** : LED indication for constant voltage / constant current operation mode.

**Output Polarity** : Floating w.r.t. ground.

**Overload Protection** : Constant current type.

**Transient Response** : 100 micro sec within 10mV of set output voltage for load change from 10% to 90%.

**Stability** : Total drift within 8 hours, after 30 minutes warm-up under constant line, load and temperature.

$< \pm 0.2\% \pm 10\text{mV}$  in CV mode.

$< \pm 0.5\% \pm 10\text{mA}$  in current mode.

**Operating Temperature** : 0 to 50°C.

**Temp. Coefficient** :  $\pm 0.05\% \pm 5\text{mV}$  per OC after initial warm-up of 30 minutes, in voltage mode.

**Line Voltage** : 230V AC  $\pm 10\%$ , single phase 50Hz.

- Phase Controlled Pre- Regulation Plus Linear Post- Regulation
- Two Digital Meters - 3 Digit DPMs
- Constant Voltage / Constant Current Operation
- 19" Rack Adaptable
- Remote Sensing Facility
- High Stability and Close Regulation  $\pm 0.01\%$

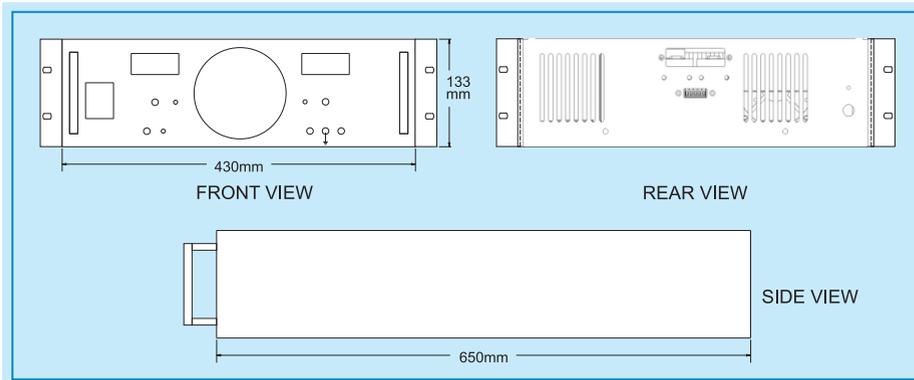
## Special Features at Extra Cost

- Presetting Facility
- Over Voltage Protection
- 19" Rack Mounting
- Analog programming & monitoring for Voltage & Current.
- Digital meters - 4 digit DPMs
- Optional interface: RS232 / RS485 / USB

## SELECTION GUIDE

	PV	PI	DIMENSIONS	MODEL	WEIGHT
16V	0-16V	0-20A	430 x 133 x 410	VS1620	16.8
	0-16V	0-40A	430 x 133 x 410	VS1640	20.8
32V	0-32V	0-20A	430 x 133 x 410	VS3220	18.8
	0-32V	0-30A	430 x 133 x 410	VS3230	21.5
64V	0-64V	0-10A	430 x 133 x 410	VS6410	18.0
	0-64V	0-20A	430 x 133 x 410	VS6420	23.4
128V	0-128V	0-5A	430 x 133 x 410	VS1285	18.5
	0-128V	0-8A	430 x 133 x 410	VS1288	20.5

# 2KW DC Power Supplies



- Phase controlled pre-regulation plus linear post regulation
- High stability and close regulation
- 3 Digit seven segment display for V&I
- Remote sensing
- 19" rack adaptable -3U high
- Front panel potentiometer to set V&I
- 2000W different combination
- High current density.

### Special Features at Extra Cost

- Over voltage protection
- 19" rack mounting
- Analogue programming and monitoring for V&I
- Digital meters - 4 digit DPMs
- Optional interface: RS232 / RS485 / USB

MODEL	VS1699	VS3260	VS6430	VS8025	VS12815
<b>Input Voltage</b>	230V AC / 415V AC, $\pm 10\%$ , 50Hz, 1Phase/ 2 Phase				
<b>Output Voltage</b>	0 to 16V	0 to 32V	0 to 64V	0 to 80V	0 to 128V
<b>Output Current</b>	0 to 100A	0 to 60A	0 to 30A	0 to 25A	0 to 15A
<b>Line Regulation CV *</b>	$\leq 0.01\% \pm 5mV$				
<b>Load Regulation CV !</b>	$\leq 0.01\% \pm 5mV$				
<b>Line Regulation CC *</b>	$\leq 0.1\% \pm 10mA$				
<b>Load Regulation CC !!</b>	$\leq 0.1\% \pm 10mA$				
<b>Output Ripple CV (max)</b>	1mV rms				
<b>Output Ripple CC (max)</b>	100mA rms				
<b>Remote Sensing</b>	Provided				
<b>Operating Temp.</b>	0 to 50°C				
<b>Protection</b>	OL/SC (constant current type)				
<b>Indications (LED)</b>	CV & CC				
<b>3 Digit DPM</b>	V & I				
<b>Meter Accuracy</b>	$\pm 3$ counts				
<b>Input On/Off</b>	M.C.B.				
<b>Multi Turn Pot</b>	V Set & I Set				
<b>Dimensions appr.** W x H x D</b>	19 inches x 133 mm x 650 mm				
<b>Weight appr. (Kg)</b>	36.0.		44.0		

Terminals: Input and output at rear side



## ELECTRICAL SPECIFICATION: 3KW DC POWER SUPPLY

- 2200W to 3200W different combination
- High current density
- 19" rack adaptable-5U high
- Front panel potentiometer to set V&I
- Remote sensing.
- 3 Digit seven segment display for V&I
- High stability and close regulation.
- Phase controlled pre-regulation plus linear post regulation.

### Special Features at Extra Cost

- Over voltage protection
- 19" rack mounting.
- Analogue programming can be provided only for model no. VS3299, VS6450 & VS12825.
- Digital meters - 4 digit DPMs
- Optional interface: RS232 / RS485 / USB

# 3KW DC Power Supplies



## ELECTRICAL SPECIFICATION: 3KW DC POWER SUPPLY

MODEL	VS3299	VS6450	VS12825	VS3010	VS0650	VS1030
Input Voltage	230V AC / 415 V AC , ±10% , 1 Phase / 2 Phase					
Input Frequency	50Hz±2Hz					
Output Voltage	0 to 32V	0 to 64V	0 to 128V	30 to 300V	60 to 600V	150 to 1000V
Output Current	0 to 100A	0 to 50A	0 to 25A	0 to 10A	0 to 5A	0 to 3A
Line Regulation CV*	≤0.01%±2mV	≤0.01%±2mV	≤0.01%±2mV	≤0.01%±2mV	≤0.01%±2mV	0.01%±2mV
Line Regulation CC*	≤0.1%±10mA	≤0.1%±10mA	≤0.1%±10mA	NA	NA	NA
Load Regulation CV	≤0.01%±2mV	≤0.01%±2mV	≤0.01%±2mV	≤0.01%±2mV	≤0.01%±2mV	0.01%±2mV
Load Regulation CC	≤0.1%±10mA	≤0.1%±10mA	≤0.1%±10mA	NA	NA	NA
Output Ripple CV	1mV rms	1mV rms	1mV rms	10mV rms	10mV rms	10mV rms
Output Ripple CC	100mA rms	100mA rms	100mA rms	NA	NA	NA
Remote Sensing	Provided	Provided	Provided	NA	NA	NA
Operating Temp.	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C	0 to 50°C
Protection	OL/SC	OL/SC	OL/SC	OL/SC	OL/SC	OL/SC
Indication (LED)	CV/CC	CV/CC	CV/CC	CV/CL	CV/CL	CV/CL
3 Digit DPM	V & I	V & I	V & I	V & I	V & I	V & I
Meter Accuracy	±3 count	±3 count	±3 counts	±3 count	±3 counts	±3 counts
Controls (2Pole MCB)	Input On/Off	Input On/Off	Input On/Off	Input On/Off	Input On/Off	Input On/Off
Multi Turn Pots	'V' Set/'I' Set	'V' Set/'I' Set	'V' Set/'I' Set	'V' Set/'I' Set	'V' Set/'I' Set	'V' Set/'I' Set
Dimensions (approx) W x H x D (mm) * *	430x221x700	430x221x700	430x221x700	430x221x700	430x221x700	430x221x700