

ELP-34000C

ADVANCED DC ELECTRONIC LOADS



POSITIVE PROBLEM SOLVING **+ =**

With wide voltage and current ranges the ELP-34000C is an excellent series of general purpose electronic loads.

Dual setting and measurement ranges combined with 5 digit displays provide for high resolution. Dynamic operation with adjustable rise, fall and plateau times enable real world loads to be accurately simulated. Dedicated short circuit, OCP and OPP tests allow power supply behaviour and protection mechanisms to be characterised. Commonly used load set-ups can be easily and quickly saved and recalled from the front panel. Should remote control be required then LAN, USB, RS-232 or GPIB cards can be specified.

- + 9 Different Operating Modes**
- + 5 Digit Displays for V, I & W**
- + Short Circuit Test Function**
- + Adjustable Slew Rates**
- + Dual Setting Ranges**
- + Front Panel Memory**

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SELECTION TABLE

Part Number	Range 1 Max Power	Range 1 Max Voltage	Range 1 Current	Range 2 Max Power	Range 2 Max Voltage	Range 2 Current
150VDC MODELS						
ELP-34106C	600W	150VDC	0 - 60A	6kW	150VDC	0 - 600A
ELP-34108C	800W	150VDC	0 - 80A	8kW	150VDC	0 - 800A
ELP-34110C	1kW	150VDC	0 - 100A	10kW	150VDC	0 - 1000A
ELP-34112C	1.2kW	150VDC	0 - 120A	12kW	150VDC	0 - 1200A
ELP-34115C	1.5kW	150VDC	0 - 150A	15kW	150VDC	0 - 1500A
ELP-34118C	1.8kW	150VDC	0 - 180A	18kW	150VDC	0 - 1800A
ELP-34120C	2kW	150VDC	0 - 200A	20kW	150VDC	0 - 2000A
ELP-34124C	2.4kW	150VDC	0 - 200A	24kW	150VDC	0 - 2000A

600VDC MODELS

ELP-34206C	600W	600VDC	0 - 42A	6kW	600VDC	0 - 420A
ELP-34208C	800W	600VDC	0 - 56A	8kW	600VDC	0 - 560A
ELP-34210C	1kW	600VDC	0 - 70A	10kW	600VDC	0 - 700A
ELP-34212C	1.2kW	600VDC	0 - 84A	12kW	600VDC	0 - 840A
ELP-34215C	1.5kW	600VDC	0 - 105A	15kW	600VDC	0 - 1050A
ELP-34218C	1.8kW	600VDC	0 - 126A	18kW	600VDC	0 - 1260A
ELP-34220C	2kW	600VDC	0 - 140A	20kW	600VDC	0 - 1400A
ELP-34224C	2.4kW	600VDC	0 - 168A	24kW	600VDC	0 - 1680A

1200VDC MODELS

ELP-34306C	600W	1200VDC	0 - 24A	6kW	1200VDC	0 - 240A
ELP-34308C	800W	1200VDC	0 - 32A	8kW	1200VDC	0 - 320A
ELP-34310C	1kW	1200VDC	0 - 40A	10kW	1200VDC	0 - 400A
ELP-34312C	1.2kW	1200VDC	0 - 48A	12kW	1200VDC	0 - 480A
ELP-34315C	1.5kW	1200VDC	0 - 60A	15kW	1200VDC	0 - 600A
ELP-34318C	1.8kW	1200VDC	0 - 72A	18kW	1200VDC	0 - 720A
ELP-34320C	2kW	1200VDC	0 - 80A	20kW	1200VDC	0 - 800A
ELP-34324C	2.4kW	1200VDC	0 - 96A	24kW	1200VDC	0 - 960A

HIGHLIGHTED STANDARD FEATURES

**FRONT PANEL MEMORY**

150-state memory is available as standard, which allows quick initialisation and limit-setting of the unit. This makes the ELP-34105 both dependable, and mobile as an on-site load tester.

**SEQUENCING FUNCTION**

A sequencing function means that stored settings can be implemented against time, enabling the unit to carry out state-dependant and complex test routines without the need for a computer interface.

**BATTERY DISCHARGE TESTS**

The ELP-34000C series has a total of 5 battery discharge modes. These simplify test set up for users, whilst avoiding conditions which could result in permanent battery damage due to over or under voltage.

OPTIONS

CODE	DESCRIPTION
/GPIB	IEEE488.2 (GPIB) interface card
/RS232	RS-232 interface card
/USB	USB interface card
/LAN	LAN interface card
/0001	1m IEEE 488.2 cable
/0002	2m IEEE 488.2 cable
/0003	2m RS-232 cable
/1KAxM	1000A load cable (1m - 5m available, please specify)

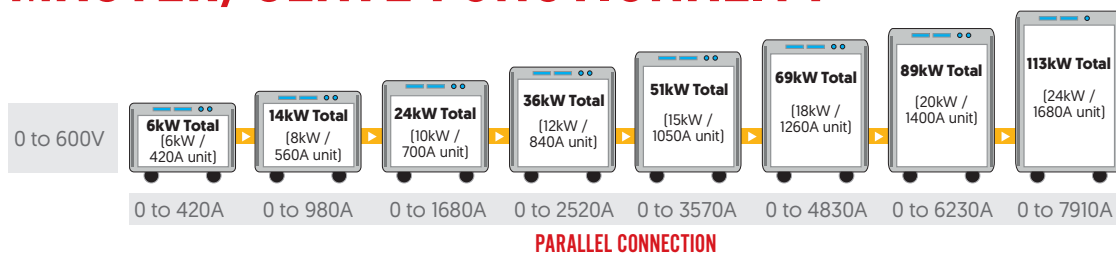
HIGHLIGHTED OPTIONS

RETROFITABLE INTERFACES

LAN, USB, RS-232 and GPIB interface cards can be easily retro-fitted or even swapped in the field by the user. As highlighted, this is possible by simply removing the two screws and replacing the interface.



MASTER/SLAVE FUNCTIONALITY



Up to eight units from the ELP-34000C series can be arranged in parallel configurations. It is possible to connect 6kW to 24kW models with the same nominal voltage with different nominal power values, up to a maximum of 192kW. For example, an 8kW system and a 18kW system can be operated together. 24kW/150V systems are an exception, as they can only be operated in parallel connection with models of the exact same specifications. The diagram above shows eight different 600V models from the ELP-34000C family operating in parallel together. When operating in master/slave operation, a number of test modes are not available. Please see the table below for more information.

ELP-34000C Operating or Test Mode	Independent Unit	Units in Master/Slave
CC Mode	✓	✓
CV Mode	✓	✓
CR Mode	✓	✓
CP Mode	✓	✓
CV+CC Mode	✓	✗
CV+CP Mode	✓	✗
MPPT Mode	✓	✗
Dynamic Mode	✓	✓
Short Mode	✓	✗
Recall/Store	✓	✗
External I/O Interface	✓	✗
OCp	✓	✗
OPP	✓	✗
Auto Sequence	✓	✗
Battery Test 1	✓	✗
Battery Test 2	✓	✗
Battery Test 3	✓	✗
Battery Test 4	✓	✗
Battery Test 5	✓	✗

TECHNICAL DATA

	ELP-34106C		ELP-34108C		ELP-34110C		ELP-34112C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Typical Short Resistance	0.0012Ω		0.0009Ω		0.0007Ω		0.0006Ω	
Load Voltage [ON/OFF]	0.25 - 62.5V / 0 - 62.5V							
Min Voltage at Full Current	0.7V at 600A		0.7V at 800A		0.7V at 1000A		0.7V at 1200A	
Short Circuit Current	600A		800A		1000A		1200A	
Max. Power Consumption	400VA		750VA		750VA		750VA	
Weight	62kg		77.5kg		84.8kg		92kg	
Operating Temperature	0 to 40°C, all datasheet measurements taken at 25°C± 5°C except where noted							
Dimensions [W × H × D]	444 × 446 × 763mm		444 × 572 × 763mm		444 × 572 × 763mm		444 × 572 × 763mm	
Safety & EMC	CE							

CC MODE

Range	60A	600A	80A	800A	100A	1000A	120A	1200A
Resolution	0.96mA	9.6mA	1.28mA	12.8mA	1.6mA	16mA	1.92mA	19.2mA
Accuracy	±0.05% of [setting + range]							

CR MODE

Range	15000 - 0.25Ω	0.25 - 0.0012Ω	11250 - 0.1875Ω	0.1875 - 0.0009Ω	9000 - 0.15Ω	0.15 - 0.0007Ω	7500-0.125Ω	0.125-0.0006Ω
Resolution	66.666μS	4.167μΩ	88.888μS	3.125μΩ	111.111μS	2.5μΩ	133.333μS	2.084μΩ
Accuracy	±0.2% of [setting + range]							

CV MODE

Range	150V							
Resolution	2.5mV							
Accuracy	±0.025% of [setting + range]							

CP MODE

Range	0.6kW	6kW	0.8kW	8kW	1kW	10kW	1.2kW	12kW
Resolution	9.6mW	96mW	12.8mW	128mW	16mW	160mW	19.2mW	192mW
Accuracy	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]

CV + CC MODE

Range	150V	600A	150V	800A	150V	1000A	150V	1200A
Resolution	2.5mV	9.6mA	2.5mV	12.8mA	2.5mV	3.2mA	2.5mV	19.2mA
Accuracy	±1.0% of [setting + range]							

CV + CP MODE

Range	150V	6kW	150V	8kW	150V	10kW	150V	12kW
Resolution	2.5mV	96mW	2.5mV	128mW	2.5mV	160mW	2.5mV	192mW
Accuracy	±1.0% of [setting + range]							

SURGE TEST

Surge and Nominal Current	0 - 600A		0 - 800A		0 - 1000A		0 - 1200A	
Surge Time	10 - 1000ms		10 - 1000ms		10 - 1000ms		10 - 1000ms	
Surge Step	1 - 5							

MPPT MODE

Algorithm	P&O							
Load Mode	CV							
P&O Interval	1000ms - 60000ms ; resolution 1000ms							

TECHNICAL DATA

	ELP-34106C		ELP-34108C		ELP-34110C		ELP-34112C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Over Power Protection	105%							
Over Current Protection	104%							
Over Voltage Protection	105%							
Over Temp. Protection	90°C ±5°C							

5-DIGIT VOLTMETER

	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V
Range	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V
Resolution	0.25mV	2.5mV	0.25mV	2.5mV	0.25mV	2.5mV	0.25mV	2.5mV
Accuracy	±0.025% of (reading + range)							

5-DIGIT AMMETER

	0 - 60A	60 - 600A	0 - 80A	80 - 800A	0 - 100A	100 - 1000A	0 - 120A	120 - 1200A
Range	0 - 60A	60 - 600A	0 - 80A	80 - 800A	0 - 100A	100 - 1000A	0 - 120A	120 - 1200A
Resolution	0.96mA	9.6mA	1.28mA	12.8mA	1.6mA	16mA	1.92mA	19.2mA
Accuracy	±0.05% of (reading + range)							

5-DIGIT POWERMETER

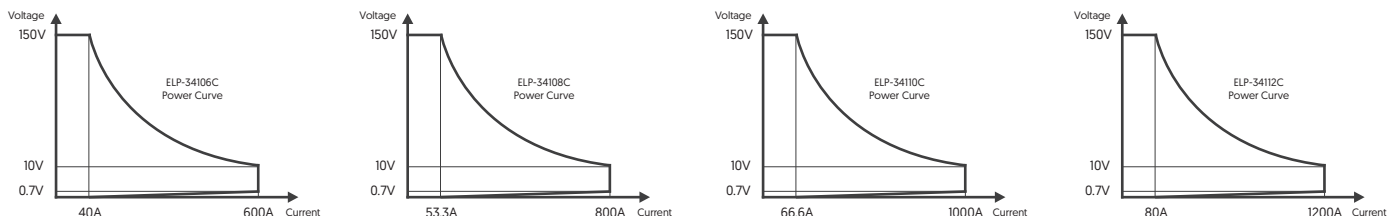
	6kW	8kW	10kW	12kW
Range	6kW	8kW	10kW	12kW
Accuracy	±0.06% of (reading + range)			

DYNAMIC OPERATION

Thigh & Tlow	0.010 - 9.999 / 99.99 / 999.9 / 9999ms							
Resolution	0.001 / 0.01 / 0.1 / 1ms							
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm							
Slew Rate Range	0.0144-0.9A/µs	0.144-9A/µs	0.0192-1.2A/µs	0.192-12A/µs	0.024-1.5A/µs	0.24-15A/µs	0.0288-1.8A/µs	0.288m-18A/µs
Slew Rate Resolution	0.0036A/µs	0.036A/µs	0.0048A/µs	0.048A/µs	0.006A/µs	0.06A/µs	0.0072A/µs	0.072A/µs
Minimum Rise Time	Typically 66.7µs							
Current Range	0 - 60A	60 - 600A	0 - 80A	80 - 800A	0 - 100A	100 - 1000A	0 - 120A	120 - 1200A
Current Resolution	0.96mA	9.6mA	1.28mA	12.8mA	1.6mA	16mA	1.92mA	19.2mA

CHARACTERISED VALUES

150V ELP-34000C series models are able to operate at maximum current across most of its voltage range. This allows one system to test many different types of devices. When operating below 0.7V, the maximum amount of current that the load can sink decreases.



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TECHNICAL DATA

	ELP-34115C		ELP-34118C		ELP-34120C		ELP-34124C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Typical Short Resistance	0.0005Ω		0.0004Ω		0.0004Ω		0.0004Ω	
Load Voltage [ON/OFF]	0.25 - 62.5V / 0 - 62.5V							
Min Voltage at Full Current	0.7V at 1500A		0.7V at 1800A		0.7V at 2000A		0.7V at 2000A	
Short Circuit Current	1500A		1800A		2000A		2000A	
Max. Power Consumption	1100VA		1100VA		1450VA		1450VA	
Weight	116.5kg		124kg		140.5kg		155kg	
Operating Temperature	0 to 40°C, all datasheet measurements taken at 25°C± 5°C except where noted							
Dimensions [W × H × D]	444 × 761 × 763mm		444 × 761 × 763mm		444 × 887 × 763mm		444 × 887 × 763mm	
Safety & EMC	CE							

CC MODE

Range	150A	1500A	180A	1800A	200A	2000A	200A	2000A
Resolution	2.4mA	24mA	2.88mA	28.8mA	3.2mA	32mA	3.2mA	32mA
Accuracy	±0.05% of [setting + range]							

CR MODE

Range	6000 - 0.1Ω	0.1 - 0.0005Ω	5000-0.0833Ω	0.0833-0.0004Ω	4500 - 0.075Ω	0.075-0.0004Ω	4500-0.075Ω	0.075-0.0004Ω
Resolution	166.666μS	1.667μΩ	200μS	1.389μΩ	222.22μS	1.25μΩ	222.22μS	1.25μΩ
Accuracy	±0.2% of [setting + range]							

CV MODE

Range	150V							
Resolution	2.5mV							
Accuracy	±0.025% of [setting + range]							

CP MODE

Range	1.5kW	15kW	1.8kW	18kW	2kW	20kW	2.4kW	24kW
Resolution	24mW	240mW	28.8mW	288mW	32mW	320mW	38.4mW	384mW
Accuracy	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]

CV + CC MODE

Range	150V	1500A	150V	1800A	150V	2000A	150V	2000A
Resolution	2.5mV	24mA	2.5mV	28.8mA	2.5mV	32mA	2.5mV	32mA
Accuracy	±1.0% of [setting + range]							

CV + CP MODE

Range	150V	15kW	150V	18kW	150V	20kW	150V	24kW
Resolution	2.5mV	240mW	2.5mV	288mW	2.5mV	320mW	2.5mV	384mW
Accuracy	±1.0% of [setting + range]							

SURGE TEST

Surge and Nominal Current	0 - 1500A		0 - 1800A		0 - 2000A		0 - 2000A	
Surge Time	10 - 1000ms		10 - 1000ms		10 - 1000ms		10 - 1000ms	
Surge Step	1 - 5							

MPPT MODE

Algorithm	P&O							
Load Mode	CV							
P&O Interval	1000ms - 6000ms ; resolution 1000ms							

TECHNICAL DATA

	ELP-34115C		ELP-34118C		ELP-34120C		ELP-34124C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Over Power Protection	105%							
Over Current Protection	104%							
Over Voltage Protection	105%							
Over Temp. Protection	90°C ±5°C							

5-DIGIT VOLTMETER

	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V
Range	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V	0 - 15V	15 - 150V
Resolution	0.25mV	2.5mV	0.25mV	2.5mV	0.25mV	2.5mV	0.25mV	2.5mV
Accuracy	±0.025% of (reading + range)							

5-DIGIT AMMETER

	0 - 150A	15 - 1500A	0 - 180A	180 - 1800A	0 - 200A	200 - 2000A	0 - 200A	200 - 2000A
Range	0 - 150A	15 - 1500A	0 - 180A	180 - 1800A	0 - 200A	200 - 2000A	0 - 200A	200 - 2000A
Resolution	2.4mA	24mA	2.88mA	28.8mA	3.2mA	32mA	3.2mA	32mA
Accuracy	±0.05% of (reading + range)							

5-DIGIT POWERMETER

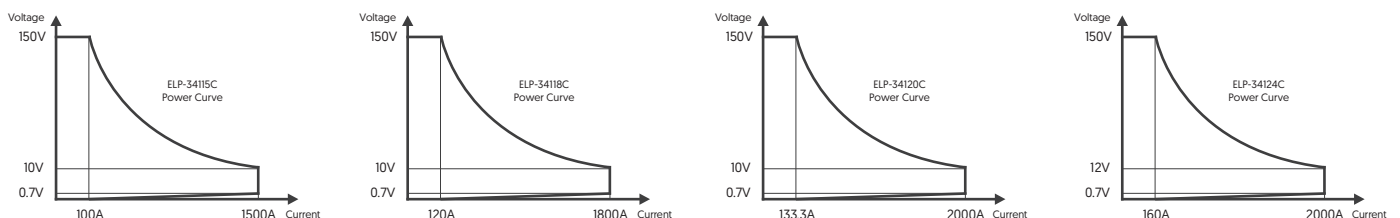
	15kW	18kW	20kW	24kW
Range	15kW	18kW	20kW	24kW
Accuracy	±0.06% of (reading + range)			

DYNAMIC OPERATION

Thigh & Tlow	0.010 - 9.999 / 99.99 / 999.9 / 9999ms							
Resolution	0.001 / 0.01 / 0.1 / 1ms							
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm							
Slew Rate Range	0.036-2.25A/µs	0.360-22.5A/µs	0.0432-2.7A/µs	0.432-27A/µs	0.048-3A/µs	0.48-30A/µs	0.048-3A/µs	0.48m-30A/µs
Slew Rate Resolution	0.009A/µs	0.09A/µs	0.0108A/µs	0.108A/µs	0.012A/µs	0.12A/µs	0.012A/µs	0.12A/µs
Minimum Rise Time	Typically 66.7µs							
Current Range	0 - 150A	150 - 1500A	0 - 180A	180 - 1800A	0 - 200A	200 - 2000A	0 - 200A	200 - 2000A
Current Resolution	2.4mA	24mA	2.88mA	28.8mA	3.2mA	32mA	3.2mA	32mA

CHARACTERISED VALUES

150V ELP-34000C series models are able to operate at maximum current across most of its voltage range. This allows one system to test many different types of devices. When operating below 0.7V, the maximum amount of current that the load can sink decreases.



Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.

TECHNICAL DATA

	ELP-34206C		ELP-34208C		ELP-34210C		ELP-34212C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Typical Short Resistance	0.0239Ω		0.0179Ω		0.0143Ω		0.00120Ω	
Load Voltage [ON/OFF]	0.4 - 100V / 0 - 100V							
Min Voltage at Full Current	10V at 420A		10V at 560A		10V at 700A		10V at 840A	
Short Circuit Current	420A		560A		700A		840A	
Max. Power Consumption	400VA		750VA		750VA		750VA	
Weight	62kg		77.5kg		84.8kg		92kg	
Operating Temperature	0 to 40°C, all datasheet measurements taken at 25°C± 5°C except where noted							
Dimensions [W × H × D]	444 × 446 × 763mm		444 × 572 × 763mm		444 × 572 × 763mm		444 × 572 × 763mm	
Safety & EMC	CE							

CC MODE

Range	42A	420A	56A	560A	70A	700A	84A	840A
Resolution	0.672mA	6.72mA	0.896mA	8.96mA	1.12mA	11.2mA	1.334mA	13.44mA
Accuracy	±0.05% of [setting + range]							

CR MODE

Range	85712 - 1.42853Ω	1.42853 - 0.02384Ω	64284 - 1.0714Ω	1.0714 - 0.01788Ω	51427.2 - 0.85712Ω	0.085712 - 0.014304Ω	42856 - 0.714267Ω	0.714267 - 0.01192Ω
Resolution	11.6669μS	23.84μΩ	15.5559μS	17.88μΩ	19.4449μS	14.304μΩ	23.3339μS	11.92μΩ
Accuracy	±0.2% of [setting + range]							

CV MODE

Range	600V							
Resolution	10mV							
Accuracy	±0.025% of [setting + range]							

CP MODE

Range	0.6kW	6kW	0.8kW	8kW	1kW	10kW	1.2kW	12kW
Resolution	9.6mW	96mW	12.8mW	128mW	16mW	160mW	19.2mW	192mW
Accuracy	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]

CV + CC MODE

Range	600V	420A	600V	560A	600V	700A	600V	840A
Resolution	10mV	6.72mA	10mV	8.96mA	10mV	11.2mA	10mV	13.44mA
Accuracy	±1.0% of [setting + range]							

CV + CP MODE

Range	600V	6kW	600V	8kW	600V	10kW	600V	12kW
Resolution	10mV	96mW	10mV	128mW	10mV	160mW	10mV	192mW
Accuracy	±1.0% of [setting + range]							

SURGE TEST

Surge and Nominal Current	0 - 420A		0 - 560A		0 - 700A		0 - 840A	
Surge Time	10 - 1000ms		10 - 1000ms		10 - 1000ms		10 - 1000ms	
Surge Step	1 - 5							

MPPT MODE

Algorithm	P&O							
Load Mode	CV							
P&O Interval	1000ms - 60000ms ; resolution 1000ms							

TECHNICAL DATA

	ELP-34206C		ELP-34208C		ELP-34210C		ELP-34212C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Over Power Protection	105%							
Over Current Protection	104%							
Over Voltage Protection	105%							
Over Temp. Protection	90°C ±5°C							

5-DIGIT VOLTMETER

	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V
Range	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V
Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
Accuracy	±0.025% of (reading + range)							

5-DIGIT AMMETER

	0 - 42A	42 - 420A	0 - 56A	56 - 560A	0 - 70A	70 - 700A	0 - 84A	84 - 840A
Range	0 - 42A	42 - 420A	0 - 56A	56 - 560A	0 - 70A	70 - 700A	0 - 84A	84 - 840A
Resolution	0.672mA	6.72mA	0.896mA	8.96mA	1.12mA	11.2mA	1.334mA	13.34mA
Accuracy	±0.05% of (reading + range)							

5-DIGIT POWERMETER

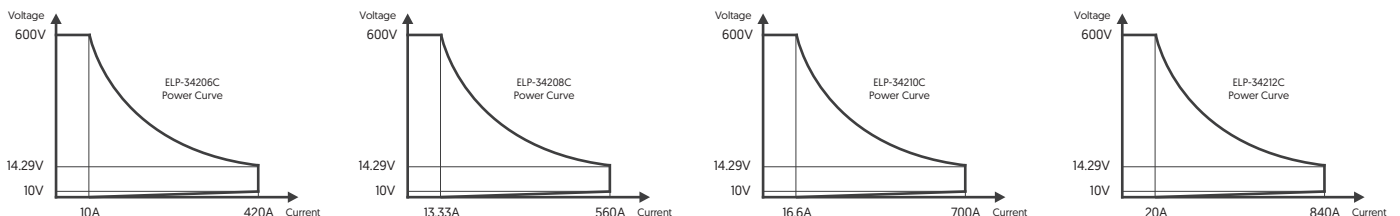
	6kW	8kW	10kW	12kW
Range	6kW	8kW	10kW	12kW
Accuracy	±0.06% of (reading + range)			

DYNAMIC OPERATION

Thigh & Tlow	0.010 - 9.999 / 99.99 / 999.9 / 9999ms							
Resolution	0.001 / 0.01 / 0.1 / 1ms							
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm							
Slew Rate Range	0.0288-1.8/µs	0.288-18A/µs	0.0288-1.8/µs	0.288-18A/µs	0.0336-2.1A/µs	0.336-21A/µs	0.0384-2.4A/µs	0.384m-24A/µs
Slew Rate Resolution	0.0072A/µs	0.072A/µs	0.0072A/µs	0.072A/µs	0.0084A/µs	0.084A/µs	0.0096A/µs	0.096A/µs
Current Range	0 - 42A	42 - 420A	0 - 56A	56 - 560A	0 - 70A	70 - 700A	0 - 84A	84 - 840A
Current Resolution	0.672mA	6.72mA	0.896mA	8.96mA	1.12mA	11.2mA	1.334mA	13.34mA

CHARACTERISED VALUES

600V ELP-34000C series models are able to operate at maximum current across most of its voltage range. This allows one system to test many different types of devices. When operating below 10V, the maximum amount of current that the load can sink decreases.



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TECHNICAL DATA

	ELP-34215C		ELP-34218C		ELP-34220C		ELP-34224C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Typical Short Resistance	0.0096Ω		0.0080Ω		0.0072Ω		0.0060Ω	
Load Voltage [ON/OFF]	0.4 - 100V / 0 - 100V							
Min Voltage at Full Current	10V at 1050A		10V at 1260A		10V at 1400A		10V at 1680A	
Short Circuit Current	1050A		1260A		1400A		1680A	
Max. Power Consumption	1100VA		1100VA		1450VA		1450VA	
Weight	116.5kg		124kg		140.5kg		155kg	
Operating Temperature	0 to 40°C, all datasheet measurements taken at 25°C± 5°C except where noted							
Dimensions [W × H × D]	444 × 761 × 763mm		444 × 761 × 763mm		444 × 887 × 763mm		444 × 887 × 763mm	
Safety & EMC	CE							

CC MODE

Range	105A	1050A	126A	1260A	140A	1400A	168A	1680A
Resolution	1.68mA	16.8mA	2.016mA	20.16mA	2.24mA	22.4mA	2.688mA	26.88mA
Accuracy	±0.05% of [setting + range]							

CR MODE

Range	34284.8 - 0.571413Ω	0.571413 - 0.009536Ω	28750.67 - 0.476178Ω	0.476178 - 0.007947Ω	25713.6 - 0.42856Ω	0.42856 - 0.007152Ω	21428 - 0.357133Ω	0.357133 - 0.00596Ω
Resolution	29.1674μS	9.536μΩ	15.5559μS	17.88μΩ	19.4449μS	14.304μΩ	23.3339μS	11.92μΩ
Accuracy	±0.2% of [setting + range]							

CV MODE

Range	600V							
Resolution	10mV							
Accuracy	±0.025% of [setting + range]							

CP MODE

Range	1.5kW	15kW	1.8kW	18kW	2kW	20kW	2.4kW	24kW
Resolution	24mW	240mW	28.8mW	288mW	32mW	320mW	38.4mW	384mW
Accuracy	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]

CV + CC MODE

Range	600V	1050A	600V	1260A	600V	1400A	600V	1680A
Resolution	10mV	16.8mA	10mV	20.16mA	10mV	22.4mA	10mV	26.88mA
Accuracy	±1.0% of [setting + range]							

CV + CP MODE

Range	600V	15kW	600V	18kW	600V	20kW	600V	24kW
Resolution	10mV	240mW	10mV	288mW	10mV	320mW	10mV	384mW
Accuracy	±1.0% of [setting + range]							

SURGE TEST

Surge and Nominal Current	0 - 1050A		0 - 1260A		0 - 1400A		0 - 1680A	
Surge Time	10 - 1000ms		10 - 1000ms		10 - 1000ms		10 - 1000ms	
Surge Step	1 - 5							

MPPT MODE

Algorithm	P&O							
Load Mode	CV							
P&O Interval	1000ms - 60000ms ; resolution 1000ms							

TECHNICAL DATA

	ELP-34215C		ELP-34218C		ELP-34220C		ELP-34224C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Over Power Protection	105%							
Over Current Protection	104%							
Over Voltage Protection	105%							
Over Temp. Protection	90°C ±5°C							

5-DIGIT VOLTMETER

	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V
Range	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V	0 - 60V	60 - 600V
Resolution	1mV	10mV	1mV	10mV	1mV	10mV	1mV	10mV
Accuracy	±0.025% of (reading + range)							

5-DIGIT AMMETER

	0 - 105A	105 - 1050A	0 - 126A	126 - 1260A	0 - 140A	140 - 1400A	0 - 168A	168 - 1680A
Range	0 - 105A	105 - 1050A	0 - 126A	126 - 1260A	0 - 140A	140 - 1400A	0 - 168A	168 - 1680A
Resolution	1.68mA	16.8mA	2.016mA	20.16mA	2.24mA	22.4mA	2.688mA	26.88mA
Accuracy	±0.05% of (reading + range)							

5-DIGIT POWERMETER

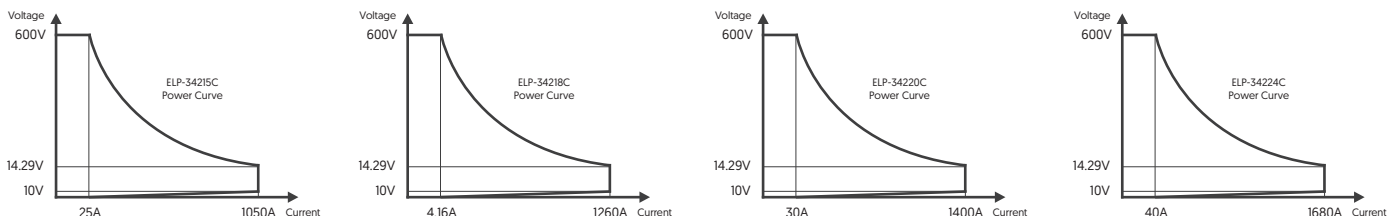
	15kW	18kW	20kW	24kW
Range	15kW	18kW	20kW	24kW
Accuracy	±0.06% of (reading + range)			

DYNAMIC OPERATION

Thigh & Tlow	0.010 - 9.999 / 99.99 / 999.9 / 9999ms							
Resolution	0.001 / 0.01 / 0.1 / 1ms							
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm							
Slew Rate Range	0.0432-2.7/µs	0.432-27/µs	0.048-3/µs	0.48-30A/µs	0.0528-3.3A/µs	0.528-33A/µs	0.0576-3.6A/µs	0.576-36A/µs
Slew Rate Resolution	0.0108A/µs	0.108A/µs	0.012A/µs	0.12A/µs	0.0132A/µs	0.132A/µs	0.0144A/µs	0.144A/µs
Current Range	0 - 105A	105 - 1050A	0 - 126A	126 - 1260A	0 - 140A	140 - 1400A	0 - 168A	168 - 1680A
Current Resolution	1.68mA	16.8mA	2.016mA	20.16mA	2.24mA	22.4mA	2.688mA	26.88mA

CHARACTERISED VALUES

600V ELP-34000C series models are able to operate at maximum current across most of its voltage range. This allows one system to test many different types of devices. When operating below 10V, the maximum amount of current that the load can sink decreases.



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TECHNICAL DATA

	ELP-34306C		ELP-34308C		ELP-34310C		ELP-34312C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Typical Short Resistance	0.0625Ω		0.0469Ω		0.0375Ω		0.0313Ω	
Load Voltage [ON/OFF]	0.96 - 240V / 0 - 240V							
Min Voltage at Full Current	15V at 240A		15V at 320A		15V at 400A		15V at 480A	
Short Circuit Current	240A		320A		400A		480A	
Max. Power Consumption	400VA		750VA		750VA		750VA	
Weight	62kg		77.5kg		84.8kg		92kg	
Operating Temperature	0 to 40°C, all datasheet measurements taken at 25°C± 5°C except where noted							
Dimensions [W × H × D]	444 × 446 × 763mm		444 × 572 × 763mm		444 × 572 × 763mm		444 × 572 × 763mm	
Safety & EMC	CE							

CC MODE

Range	24A	240A	32A	320A	40A	400A	48A	480A
Resolution	0.384mA	3.84mA	0.512mA	5.12mA	0.64mA	6.4mA	0.768mA	7.68mA
Accuracy	±0.05% of [setting + range]							

CR MODE

Range	30000 - 5Ω	5 - 0.0625Ω	22500 - 3.75Ω	3.75 - 0.0468Ω	18000 - 3Ω	3 - 0.0375Ω	15000 - 2.5Ω	2.5 - 0.0312Ω
Resolution	3.333μS	83.334μΩ	4.444μS	62.5μΩ	5.5555μS	50μΩ	6.6666μS	41.667μΩ
Accuracy	±0.2% of [setting + range]							

CV MODE

Range	1200V							
Resolution	20mV							
Accuracy	±0.025% of [setting + range]							

CP MODE

Range	0.6kW	6kW	0.8kW	8kW	1kW	10kW	1.2kW	12kW
Resolution	9.6mW	96mW	12.8mW	128mW	16mW	160mW	19.2mW	192mW
Accuracy	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]

CV + CC MODE

Range	1200V	240A	1200V	320A	1200V	400A	1200V	480A
Resolution	20mV	3.84mA	20mV	5.12mA	20mV	6.4mA	20mV	7.68mA
Accuracy	±1.0% of [setting + range]							

CV + CP MODE

Range	1200V	6kW	1200V	8kW	1200V	10kW	1200V	12kW
Resolution	20mV	96mW	20mV	128mW	20mV	160mW	20mV	192mW
Accuracy	±1.0% of [setting + range]							

SURGE TEST

Surge and Nominal Current	0 - 240A		0 - 320A		0 - 400A		0 - 480A	
Surge Time	10 - 1000ms		10 - 1000ms		10 - 1000ms		10 - 1000ms	
Surge Step	1 - 5							

MPPT MODE

Algorithm	P&O							
Load Mode	CV							
P&O Interval	1000ms - 60000ms ; resolution 1000ms							

TECHNICAL DATA

	ELP-34306C		ELP-34308C		ELP-34310C		ELP-34312C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Over Power Protection	105%							
Over Current Protection	104%							
Over Voltage Protection	104%							
Over Temp. Protection	90°C ±5°C							

5-DIGIT VOLTMETER

	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V
Range	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V
Resolution	2mV	20mV	2mV	20mV	2mV	20mV	2mV	20mV
Accuracy	±0.025% of (reading + range)							

5-DIGIT AMMETER

	0 - 24A	24 - 240A	0 - 32A	32 - 320A	0 - 40A	40 - 400A	0 - 48A	48 - 480A
Range	0 - 24A	24 - 240A	0 - 32A	32 - 320A	0 - 40A	40 - 400A	0 - 48A	48 - 480A
Resolution	0.384mA	3.84mA	0.512mA	5.12mA	0.64mA	6.4mA	0.768mA	7.68mA
Accuracy	±0.05% of (reading + range)							

5-DIGIT POWERMETER

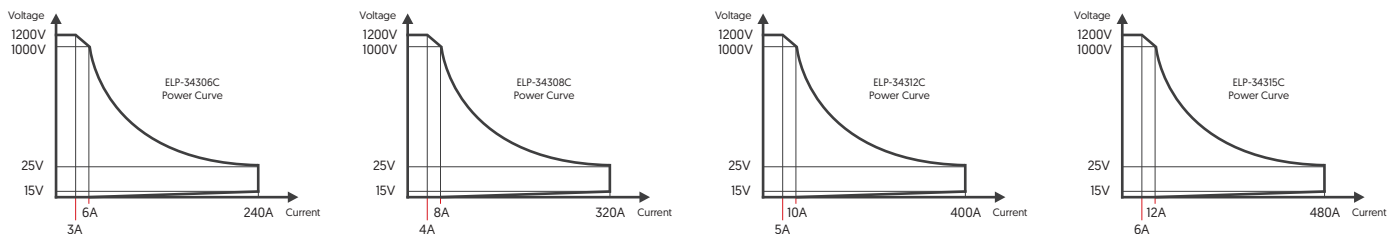
	6kW	8kW	10kW	12kW
Range	6kW	8kW	10kW	12kW
Accuracy	±0.06% of (reading + range)			

DYNAMIC OPERATION

Thigh & Tlow	0.010 - 9.999 / 99.99 / 999.9 / 9999ms							
Resolution	0.001 / 0.01 / 0.1 / 1ms							
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm							
Slew Rate Range	0.0192-1.2/µs	0.192-12A/µs	0.0192-1.2/µs	0.192-12A/µs	0.0224-1.4A/µs	0.224-14A/µs	0.0256-1.6A/µs	0.256m-16A/µs
Slew Rate Resolution	0.0048A/µs	0.048A/µs	0.0048A/µs	0.048A/µs	0.0056A/µs	0.056A/µs	0.0064A/µs	0.064A/µs
Current Range	0 - 24A	24 - 240A	0 - 32A	32 - 320A	0 - 40A	40 - 400A	0 - 48A	48 - 480A
Current Resolution	0.384mA	3.84mA	0.512mA	5.12mA	0.64mA	6.4mA	0.768mA	7.68mA

CHARACTERISED VALUES

1200V ELP-34000C series models are able to operate at maximum current across most of its voltage range. This allows one system to test many different types of devices. When operating below 15V, the maximum amount of current that the load can sink decreases.



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TECHNICAL DATA

	ELP-34315C		ELP-34318C		ELP-34320C		ELP-34324C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Typical Short Resistance	0.0250Ω		0.0209Ω		0.0188Ω		0.0157Ω	
Load Voltage [ON/OFF]	0.96 - 240V / 0 - 240V							
Min Voltage at Full Current	15V at 600A		15V at 720A		15V at 800A		15V at 960A	
Short Circuit Current	600A		720A		800A		960A	
Max. Power Consumption	1100VA		1100VA		1450VA		1450VA	
Weight	116.5kg		124kg		140.5kg		155kg	
Operating Temperature	0 to 40°C, all datasheet measurements taken at 25°C± 5°C except where noted							
Dimensions [W × H × D]	444 × 761 × 763mm		444 × 761 × 763mm		444 × 887 × 763mm		444 × 887 × 763mm	
Safety & EMC	CE							

CC MODE

Range	60A	600A	72A	720A	80A	800A	96A	960A
Resolution	0.96mA	9.6mA	1.152mA	11.52mA	1.28mA	12.8mA	1.536mA	15.36mA
Accuracy	±0.05% of [setting + range]							

CR MODE

Range	12000 - 2Ω	2 - 0.0250Ω	10000-1.666Ω	1.666-0.0208Ω	9000 - 1.5Ω	1.5-0.0187Ω	7500-1.25Ω	1.25-0.0156Ω
Resolution	8.3333μS	33.334μΩ	10μS	27.778μΩ	11.111μS	25μΩ	13.333μS	20.834μΩ
Accuracy	±0.2% of [setting + range]							

CV MODE

Range	1200V							
Resolution	20mV							
Accuracy	±0.025% of [setting + range]							

CP MODE

Range	1.5kW	15kW	1.8kW	18kW	2kW	20kW	2.4kW	24kW
Resolution	24mW	240mW	28.8mW	288mW	32mW	320mW	38.4mW	384mW
Accuracy	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]	±0.2% of [setting + range]	±0.1% of [setting + range]

CV + CC MODE

Range	1200V	600A	1200V	720A	1200V	800A	1200V	960A
Resolution	20mV	9.6mA	20mV	3.2mA	20mV	3.84mA	20mV	15.36mA
Accuracy	±1.0% of [setting + range]							

CV + CP MODE

Range	1200V	15kW	1200V	18kW	1200V	20kW	1200V	24kW
Resolution	20mV	240mW	20mV	288mW	20mV	320mW	20mV	384mW
Accuracy	±1.0% of [setting + range]							

SURGE TEST

Surge and Nominal Current	0 - 600A		0 - 720A		0 - 800A		0 - 960A	
Surge Time	10 - 1000ms		10 - 1000ms		10 - 1000ms		10 - 1000ms	
Surge Step	1 - 5							

MPPT MODE

Algorithm	P&O							
Load Mode	CV							
P&O Interval	1000ms - 6000ms ; resolution 1000ms							

TECHNICAL DATA

	ELP-34315C		ELP-34318C		ELP-34320C		ELP-34324C	
	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2	RANGE 1	RANGE 2
Over Power Protection	105%							
Over Current Protection	104%							
Over Voltage Protection	104%							
Over Temp. Protection	90°C ±5°C							

5-DIGIT VOLTMETER

	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V
Range	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V	0 - 120V	120 - 1200V
Resolution	2mV	20mV	2mV	20mV	2mV	20mV	2mV	20mV
Accuracy	±0.025% of (reading + range)							

5-DIGIT AMMETER

	0 - 60A	60 - 600A	0 - 72A	72 - 720A	0 - 80A	80 - 800A	0 - 96A	96 - 960A
Range	0 - 60A	60 - 600A	0 - 72A	72 - 720A	0 - 80A	80 - 800A	0 - 96A	96 - 960A
Resolution	0.96mA	9.6mA	1.152mA	11.52mA	1.28mA	12.8mA	1.536mA	15.36mA
Accuracy	±0.05% of (reading + range)							

5-DIGIT POWERMETER

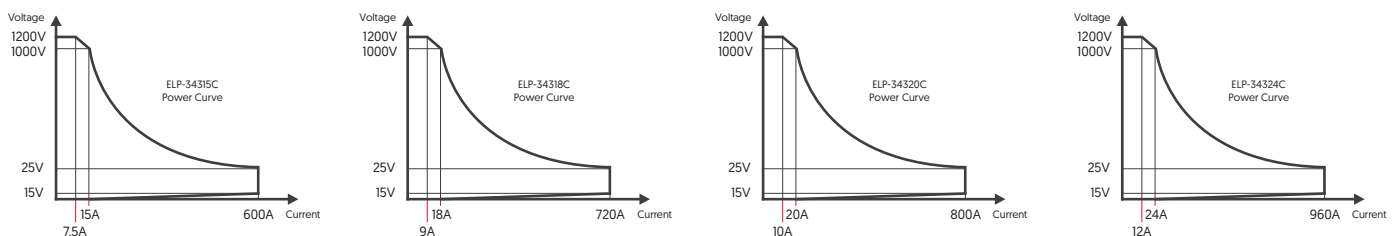
	15kW	18kW	20kW	24kW
Range	15kW	18kW	20kW	24kW
Accuracy	±0.06% of (reading + range)			

DYNAMIC OPERATION

Thigh & Tlow	0.010 - 9.999 / 99.99 / 999.9 / 9999ms							
Resolution	0.001 / 0.01 / 0.1 / 1ms							
Accuracy	1µs / 10µs / 100µs / 1ms + 50ppm							
Slew Rate Range	0.0288-1.8A/µs	0.288-18A/µs	0.032-2A/µs	0.32-20A/µs	0.0352-2.2A/µs	0.352-22A/µs	0.0384-2.4A/µs	0.384m-24A/µs
Slew Rate Resolution	0.0072A/µs	0.072A/µs	0.008A/µs	0.08A/µs	0.0088A/µs	0.088A/µs	0.0096A/µs	0.096A/µs
Current Range	0 - 60A	60 - 600A	0 - 72A	72 - 720A	0 - 80A	80 - 800A	0 - 96A	96 - 960A
Current Resolution	0.96mA	9.6mA	1.152mA	11.52mA	1.28mA	12.8mA	1.536mA	15.36mA

CHARACTERISED VALUES

1200V ELP-34000C series models are able to operate at maximum current across most of its voltage range. This allows one system to test many different types of devices. When operating below 15V, the maximum amount of current that the load can sink decreases.



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ETPS engineer electronic power supply and testing systems. Our problem solving skills provide the spark of innovation to some of the world's leading technology brands.



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