

RENTAL

ELP-34105

HIGH CURRENT HIGH POWER LOADS



POSITIVE PROBLEM SOLVING **+ =**

This range of high power electronic loads provides a high current sink capability of up to 2000Amps from 0.7V.

Each load unit has two load ranges one at 0-100A and the other at 100-1000A with auto crossover in CC mode. The range comprises of 4 models which can be combined in master/slave up to 10kW/2000A. All units can operate in CC, CV, CR, CP, CV+CC, CV+CP, MPPT, Dynamic and Short Modes. The current Slew Rate is adjustable for both ranges and to aid production testing to a pre-set value the unit is equipped with a GO/NG indicator. The LCD display simultaneously shows Voltage, Current & Power.

- + 9 Different Operating Modes as Standard**
- + Single Key OCP & OPP Test Function**
- + AC Input 115/230Vac Selectable**
- + Protection for OV, OC, OP & OT**
- + Simultaneous V, I & W Display**
- + High Current Sink up to 2000A**

ELP-34105

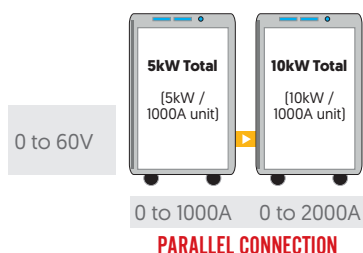
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SELECTION TABLE

Part Number	Max Power	Max Voltage	Current Range
ELP-34105-r	5kW	60VDC	0 - 1000A
ELP-34105-2-r	10kW	60VDC	0 - 2000A

MASTER/SLAVE FUNCTIONALITY



Systems are configured from individual 5kW DC loads operated in parallel connection. Each unit is able to operate independently, so that systems can be expanded or broken up as needs dictate.

Our rental systems can be combined in parallel connection with any ELP-34105 series units you have previously purchased. When operating in master/slave operation, a number of test modes are not available. Please see the table below for more information.



ELP-34105 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 - 34105 (PER 5kW UNIT)	
	RANGE 1	RANGE 2
Load Voltage [ON/OFF]	0.1 - 25V / 0 - 25V	
Min. Operation Voltage	0.1V at 100A	0.7V at 1000A
Short Circuit Current	1000A	
Max. Power Consumption	600W	
Weight	100kg	
Operating Temperature	0 to 40°C, all measurements taken at 25°C± 5°C, except where noted	
Dimensions [W × H × D]	647 × 573 × 766mm	
Safety & EMC	CE	
CC MODE		
Current Sink Value	0 - 100A	0 - 1000A
Resolution	1.667mA	16.67mA
Accuracy	± [0.1% of setting + 0.2% of range]	
CR MODE		
Resistance Sink Value	3600 - 0.06Ω	0.06 - 0.001Ω
Resolution	277μS	0.001mΩ
Accuracy	± 0.2% of [setting + range]	
CV MODE		
Voltage Sink Value	0 - 60V	
Resolution	1mV	
Accuracy	± 0.05% of [setting + range]	
CP MODE		
Power Sink Value	0 - 500W	0 - 5kW
Resolution	8.34mW	83.4mW
Accuracy	± 0.5% of [setting + range]	
CV + CC MODE		
Range	0 - 60V	0 - 1000A
Resolution	1mV	16.67mA
Accuracy	± 1.0% of [setting + range]	
CV + CP MODE		
Range	0 - 60V	0 - 5kW
Resolution	1mV	83.4mW
Accuracy	± 1.0% of [setting + range]	
MPPT MODE		
Algorithm	P&O + Scanning	
Load Mode	CC, CR, CV [MPPT C, R, V]	
Sampling Interval	10ms-2000ms ; resolution 1ms	
P&O Interval	10ms-2000ms ; resolution 1ms	

HIGHLIGHTED 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.



2x^{4x} 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-34105 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.

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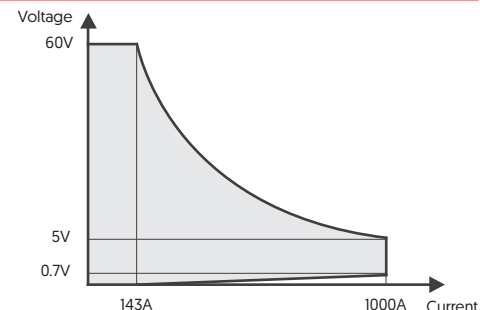
TECHNICAL DATA

	ELP - 34105 (PER 5kW UNIT)	
	RANGE 1	RANGE 2
Over Power Protection	105%	
Over Current Protection	105%	
Over Voltage Protection	105%	
Over Temp. Protection	Yes	
5-DIGIT VOLTMETER		
Range	0 - 6V	6 - 60V
Resolution	0.1mV	1mV
Accuracy	± 0.025% of [setting + range]	
5-DIGIT AMMETER		
Range	0 - 100A	100 - 1000A
Resolution	1.667mA	16.67mA
Accuracy	± 0.1% of [setting + range]	
5-DIGIT POWERMETER		
Range	0 - 500W	0 - 5kW
Resolution	0.01W	0.1W
Accuracy	± 0.125% of [setting + range]	
DYNAMIC OPERATION		
Thigh & Tlow	0.150 - 9.999/99.99/999.9/9999ms	
Resolution	0.001 / 0.01 / 0.1 / 1mS	
Accuracy	1µS / 10µS / 100µS / 1mS + 50ppm	
Slew Rate Range	66.4mA-4.15A/µs	664mA-41.5A/µs
Slew Rate Resolution	16.6mA / µs	166mA / µs
Minimum Rise Time	Typically 24µs	
Current Range	0 - 100A	100 - 1000A
Current Resolution	1.667mA	16.67mA
Accuracy	± [0.1% of setting + 0.2% of range]	

CHARACTERISED VALUES

The ELP-34105 is 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. The values for this derating at low voltages are provided below per 5kW unit.

VOLTAGE	CURRENT
0.7V	1000A
0.6V	857A
0.5V	714A
0.4V	571A
0.3V	429A
0.2V	286A
0.1V	143A



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.



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Tel: +44 (0) 1246 452909
Sales: 0800 612 95 75
sales@etps.co.uk
www.etps.co.uk

ETPS Ltd
Unit 14, The Bridge
Beresford Way, Chesterfield
S41 9FG



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