ETPS
ELECTRONIC TEST & POWER SYSTEMS

ELP-3330F
DUAL CHANNEL DC ELECTRONIC LOAD

POSITIVE PROBLEM SOLVING **+ =**

The ELP-3330F load modules offer 2 independently adjustable load channels in one module. The 5 digit high resolution display shows V, I & P simultaneously for both load channels.

Each channel has CC, CR, CV & CP operating modes along with a programmable short test function that measures the short voltage and current. Adjustable overcurrent and overpower protection test modes are also provided for testing PSU limits. When in constant current or power modes dynamic operation is possible allowing the load to switch between 2 current levels.

+ **CC, CR, CV, CP and Dynamic Operation**
+ **Adjustable OCP, OPP & Short Tests**
+ **Selectable Load ON/OFF Voltage**
+ **5 digit V, I & W Display**

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FURTHER DETAILS

The slew rate along with the time spent at the higher and lower load levels can be adjusted. Remote sense capability is also provided to counter voltage drops in the load lines. The voltage at which the Load switches on and off can be preset making these units ideal for sensitive applications such as battery discharging. Limits can be set to flag GO/NG indication making these units ideal for batch and production testing as well as general laboratory work.

These dual channel load modules are operated from within single, dual or 4 slot mainframes. A fully populated ELP-3300F takes only 4U of rack space and provides 8 independent channels. LAN, USB, RS-232 and IEEE 488.2.interfaces are optionally available. The mainframes also have a memory function allowing setups to be quickly stored and recalled.

SELECTION TABLE

Part Number	Channel A Power	Channel A Max Voltage	Channel A Current	Channel B Power	Channel B Max Voltage	Channel B Current
ELP-3330F	250W	80VDC	0 - 60A	50W	80VDC	0 - 6A
ELP-3332F	120W	80VDC	0 - 24A	120W	80VDC	0 - 24A
ELP-3336F	40W	80VDC	0 - 3A	40W	80VDC	0 - 3A

OPTIONS

CODE	DESCRIPTION
/3302F	Single slot mainframe (separate summary available)
/3305F	Dual slot mainframe (separate summary available)
/3300F	Four slot mainframe (separate summary available)
/LT	Mainframe selection includes IEEE488.2 (GPIB) interface card
/RS232	Mainframe selection includes RS-232 interface card
/LT+RS232	Mainframe selection includes RS-232 and IEEE488.2 interface card
/LAN	Mainframe selection includes LAN interface card
/USB	Mainframe selection includes USB interface card
/DSK	Disable short test function key
/0001	1m IEEE488.2 cable
/0002	2m IEEE488.2 cable
/0003	2m RS-232 cable
/9931	Remote controller

TECHNICAL DATA

	ELP-3330F		ELP-3332F		ELP-3336F	
	CHANNEL 1	**CHANNEL 2**	**CHANNEL 1**	**CHANNEL 2**	**CHANNEL 1**	**CHANNEL 2**
Maximum Power	250W	50W	120W	120W	40W	40W
Current Range	0 - 60A	0 - 6A	0 - 24A	0 - 24A	0 - 3A	0 - 3A
Voltage Range	0 - 80V	0 - 80V	0 - 80V	0 - 80V	0 - 80V	0 - 80V
V_{MIN} to Sink Full Current	0.8V for 60A	0.8V for 6A	0.8V for 24A	0.8V for 24A	0.3V for 3A	0.3V for 3A

CC MODE						
Range 1 [Resolution]	0 - 6A [100µA]	0 - 600mA [10µA]	0 - 2.4A [40µA]	0 - 2.4A [40µA]	0 - 300mA [5µA]	0 - 300mA [5µA]
Range 2 [Resolution]	0 - 60A [1mA]	0 - 60A [100µA]	0 - 24A [400µA]	0 - 24A [400µA]	0 - 3A [50µA]	0 - 3A [50µA]
Accuracy	± 0.1% of [setting + range] + 0.1% of full scale range					

CR MODE						
Range 1 [Resolution]	0.01335 -1.335kΩ [16 bits]		0.0333 - 3.33kΩ [16 bits]		0.267 - 26.7kΩ [16 bits]	
Range 2 [Resolution]	1.335 - 80.1kΩ [16 bits]		3.33 - 199.8kΩ [16 bits]		26.7 - 1602kΩ [16 bits]	
Accuracy	± 0.2% of [setting + range] + 0.2% of full scale range					

CV MODE						
Range 1 [Resolution]	0 - 6V [135µV]					
Range 2 [Resolution]	0 - 80V [1.35mV]					
Accuracy	± 0.05% of [setting + range] + 0.05% of full scale range					

CP MODE						
Range 1 [Resolution]	0 - 25W [417µW]	0 - 5W [84µW]	0 - 12W [200µW]	0 - 12W [200µW]	0 - 4W [67µW]	0 - 4W [67µW]
Range 2 [Resolution]	0 - 250W [4.17mW]	0 - 50W [10mW]	0 - 120W [2mW]	0 - 120W [2mW]	0 - 40W [670µW]	0 - 40W [670µW]
Accuracy	± 0.5% of [setting + range]					

DYNAMIC OPERATION						
Thigh & Tlow	50µSec to 9.999Sec					
Slew Rate 1	4 - 250mA/µsec	0.4 - 25mA/µsec	1.6 - 100mA/µsec	1.6 - 100mA/µsec	0.2 - 12.5mA/µsec	0.2 - 12.5mA/µsec
Slew Rate 2	40 - 2500mA/µsec	4 - 250mA/µsec	16 - 1000/µsec	16 - 1000/µsec	2 - 125mA/µsec	2 - 125mA/µsec
Resolution	8 bits					
Accuracy	± [5% of setting] ± 10µS					
Minimum Rise Time	Typically 24µS					

VOLTAGE READBACK						
Range 1 [Resolution]	0 - 6V [100µV]					
Range 2 [Resolution]	6 - 81V [1.35mV]					
Accuracy	± 0.025% of reading + 0.025% of range					

CURRENT READBACK						
Range 1 [Resolution]	0 - 6A [100µA]	0 - 600mA [10µA]	0 - 2.4A [40µA]	0 - 2.4A [40µA]	0 - 300mA [5µA]	0 - 300mA [5µA]
Range 2 [Resolution]	6 - 60A [1mA]	0.6 - 6A [100µA]	2.4 - 24A [400µA]	2.4 - 24A [400µA]	0.3 - 3A [50µA]	0.3 - 3A [50µA]
Accuracy	± 0.1% of reading + 0.1% of range					

OTHER						
Load On Voltage	0.1 - 25V [resolution 0.1V]					
Accuracy	± 1 % of setting + 0.25V					
Load Off Voltage	0 - 25V [resolution 1.35mV]					
Accuracy	± 0.025% of setting + 0.025% of range					
Operating Temperature	0 to +40°C [specifications characterised at 25°C ± 5°C]					
Temperature Coefficient	Typically 100ppm/°C					
Protections	Over temperature, over power / voltage / current at 105% of full scale values					
Short Circuit Current	60A	6A	24A	24A	3A	3A

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.

" WE ARE POSITIVE PEOPLE "

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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