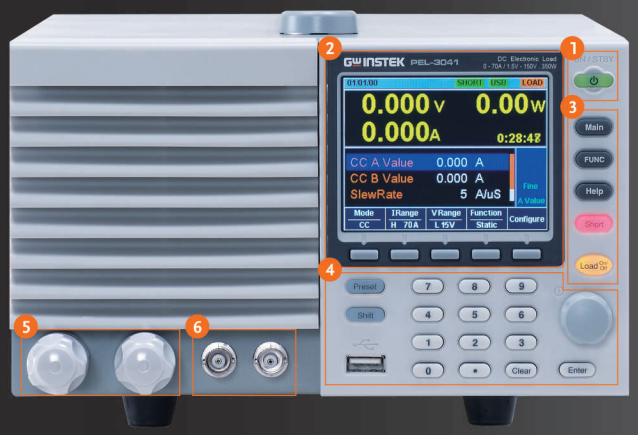
PANEL INTRODUCTION

CE | USB | GPIB | Analog Control | RS-232



1. ON / STBY
2. LCD Display
3. Function Keys
4. Operation Key
5. Front Panel Input Terminals
6. I MON, TRIG OUT Terminals
7. Rear Panel Inputs Terminals
8. Frame Control Ports, J1, J2
9. GPIB
10. RS232C Port
11. USB Port

SPECIFICATIONS

Model			PEL-3021			PEL-3041			PEL-3111			PEL-3211
Voltage Current Power			1.5V~150V 35A 175W			1.5V~150V 70A 350W			1.5V~150V 210A 1050W			1.5V~150V 420A 2100W
CONSTANT CURRENT MODE												
Operating Range			0~35A	0~3.5A	0~0.35A	A~70A	A~7A	A~0.7A	A~210A	A~21A	A~2.1A	420A ±(1.2% of set+1.1% of f.s)
Accuracy of Setting	H, M, L		±(0.2 % of set + 0.1 % of f.s*1) + Vin*2/500 kΩ									
Accuracy of Setting(Parallel)	H, M, L		±(1.2% of set +1.1% of f.s.*3)									
Resolution			1mA	0.1mA	0.01mA	2mA	0.2mA	0.02mA	10mA	1mA	0.1mA	N/A
CR MODE												
Operating Range	Range	H	23.3336S~400μS (42.857mΩ~2.5kΩ)			46.6672S~800μS (21.428mΩ~1.25kΩ)			140.0016S~2.4mS (7.1427mΩ~416.6667 Ω)			28.0002s~484.8μs (35.7135mΩ~2.08334Ω)
		M	2.33336S~40μS (428.566mΩ~25kΩ)			4.6667S~80μS (214.28mΩ~12.5kΩ)			14.0001S~242.4μS (71.427mΩ~4.16667k Ω)			
		L	0.233336S~4μS (4.28566Ω~250kΩ)			0.46667S~8μS (2.1428Ω~125kΩ)			1.40001S~24.24μS (714.27mΩ~41.6667k Ω)			
Accuracy of Setting	H, M, L		±(0.5 % of set*4 + 0.5 % of f.s*3) + Vin*3/500kΩ									±(1.2% of set +1.1% of f.s)
Resolution			400μS	40μS	4μS	800μS	80μS	8μS	2.4mS	240μS	24μS	N/A
CONSTANT VOLTAGE MODE												
Operating Range	Range	H	1.5V~150V									1.5V~150V
		L	1.5V~15V									1.5V~15V
Accuracy of Setting	H, L		±(0.1 % of set + 0.1 % of f.s)									N/A
Resolution	H, L		10mV/1mV									

SPECIFICATIONS

Model			PEL-3021			PEL-3041			PEL-3111			PEL-3211
CONSTANT POWER MODE												
Operating Range	Range	H	17.5W~175W			35W~350W			105W~1050W			210W~2100W
		M	1.75W~17.5W			3.5W~35W			10.5W~105W			21W~210W
		L	0.175W~1.75W			0.35W~3.5W			1.05W~10.5W			2.1W~21W
Accuracy of Setting	H, M, L		±(0.6 % of set *5 + 1.4 % of f.s *6)									N/A
Resolution			10mW	1mW	0.1mW	10mW	1mW	0.1mW	100mW	10mW	1mW	
PARALLEL Mode												
Capacity			875W			1750W			5250W			PEL-3111 with 4 booster units : Max 9.45kW
SLEW RATE												
Setting Range (CC mode)	Range	H	2.5mA/μs~2.5A/μs			5mA/μs~5A/μs			16mA/μs~16A/μs			16mA/μs~16A/μs
		M	250μA/μs~250mA/μs			500μA/μs~500mA/μs			1.6mA/μs~1.6A/μs			1.6mA/μs~1.6A/μs
		L	25μA/μs~25mA/μs			50μA/μs~50mA/μs			160μA/μs~160mA/μs			N/A
Setting Range (CR Mode)	Range	H	250μA/μs~250mA/μs			500μA/μs~500mA/μs			1.6mA/μs~1.6A/μs			1.6mA/μs~1.6A/μs
		M	25μA/μs~25mA/μs			50μA/μs~50mA/μs			160μA/μs~160mA/μs			160μA/μs~160mA/μs
		L	2.5μA/μs~2.5mA/μs			5μA/μs~5mA/μs			16μA/μs~16mA/μs			N/A
Accuracy of Setting	H, M, L		±(10 % of set*7 + 5μs)									N/A
Resolution			0.1μA ~ 1mA			0.2μA ~ 2mA			0.6μA ~ 6mA			N/A
METER												
Voltmeter	Accuracy		±(0.1 % of rdg + 0.1 % of f.s)									N/A
Ammeter	Accuracy		±(0.2 % of rdg + 0.3 % of f.s)									
Ammeter(Parallel Operation)	Accuracy		±(1.2% of rdg +1.1% of f.s.)									
DYNAMIC MODE												
Operation Mode			CC and CR									
T1 & T2			0.025mS~10mS/Res : 1μs ; 1ms~30s/Res : 1ms									
Accuracy			1μS/1ms ± 100ppm									
Slew Rate	Range	H	2.5mA/μs~2.5A/μs			5mA/μs~5A/μs			16mA/μs~16A/μs			16mA/μs~16A/μs
		M	250μA/μs~250mA/μs			500μA/μs~500mA/μs			1.6mA/μs~1.6A/μs			1.6mA/μs~1.6A/μs
		L	25μA/μs~25mA/μs			50μA/μs~50mA/μs			160μA/μs~160mA/μs			N/A
Current Accuracy			±0.4%F.S.			±0.4%F.S.			±0.4%F.S.			±(1.2%of set+1.1% of F.S.)
PROTECTION FUNCTION												
Overvoltage protection(OVP)			Adjustable ; Turns off the load at 110% of the rated voltage									N/A
Overcurrent protection(OCP)			0.03A~38.5A(Adjustable)			0.06A~77A(Adjustable)			0.2A~231A(Adjustable)			
Overpower protection(OPP)			0.1W~192.5W(Adjustable)			0.3W~385W(Adjustable)			1W~1155W(Adjustable)			
Overheat protection(OHP)			Turns off the load when the heat sink temperature reaches 95 °C									
Undervoltage protection(UVP)			Adjustable : Turns off the load when detected Can be set in the range of 0 V to 150 V or Off									
Reverse connection protection(REV)			By diode. Turns off the load when an alarm occurs									
POWER SOURCE												
AC100V ~ 230V±10% ; 50Hz / 60Hz ± 2Hz												
INTERFACE												
USB/RS232/Analog Control (Standard) ; GPIB(Option)												
DIMENSIONS & WEIGHT												
			214.5(W)x124(H)x400(D)mm; Approx. 6kg			214.5(W)x124(H)x400(D)mm; Approx. 7kg			429.5(W)x128(H)x400(D)mm; Approx. 17kg			427.7(W)x147.8(H)x592.5(D)mm; Approx. 23kg

*1. Full scale of H range.
*2. Vin: input terminal voltage of electronic load.
*3. M range applies to the full scale of H range.
*4. Set = Vin/Rset.
*5. It is not applied for the condition of the parallel operation.
*6. M range applies to the full scale of H range.
*7. Time to reach from 10 %~90 % when the current is varied from 2 %~100 %(20 %~100 % in M range) of the rated current.

Specifications subject to change without notice. EL-3000GD1BH

ORDERING INFORMATION

PEL-3021 175W Programmable DC Electronic Load
PEL-3041 350W Programmable DC Electronic Load
PEL-3111 1050W Programmable DC Electronic Load
PEL-3211 2100W Booster unit for PEL-3111 only

ACCESSORIES :
User Manual x 1, Power Cord x 1

OPTIONAL ASSESSORIES

GTL-120 Test Lead (Max 40A)
GTL-248 GPIB Cable (2m)
GTL-246 USB Cable, USB 2.0A-B TYPE CABLE, 4P
GTL-255 Frame Link Cable (300mm)
GTL-251 GPIB-USB-HS (High Speed)
GTL-252 Frame Link Cable (550mm)
GRA-413 Rack Mount Kit (EIA+JIS) for PEL-3211
GRA-414-J Rack Mount Kit (JIS) for PEL-3021/3041/3111
GRA-414-E Rack Mount Kit (EIA) for PEL-3021/3041/3111

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