

GPS65 Series

Single, dual and triple output 65W AC/DC Power Supplies



Unless stated all specifications are typical and rated at full load, nominal input voltage, convection cooling and 25°C.

Model Number	RS Stock Number	Output Voltage	Output Current Max ¹ Peak ² Fan ³
GPS65-1002	456-1492	V1 5V	8.0A 12.0A 11.0A
GPS65-1003	456-1515	V1 12V	3.3A 6.5A 5.4A
GPS65-1004	456-1521	V1 15V	2.6A 5.0A 4.3A
GPS65-1005	456-1537	V1 24V	1.6A 3.5A 2.7A
GPS65-1006	456-1543	V1 48V	0.8A 1.6A 1.3A
GPS65-2000	456-1559	V1 5V	3.0A 7.5A 6.0A
		V2 12V	2.4A 4.5A 3.0A
GPS65-3000	456-1565	V1 5V	3.0A 7.5A 6.0A
		V2 12V	2.0A 3.5A 2.5A
		V3 -12V	0.4A 1.0A 0.4A
GPS65-3001	456-1571	V1 5V	3.0A 7.5A 6.0A
		V2 15V	1.6A 3.0A 2.0A
		V3 -15V	0.3A 1.0A 0.35A
ACC-GPS65-3	456-1587	Metal cover kit accessory	

INPUT SPECIFICATIONS

Input Voltage	Universal	90-264VAC 120-370VDC
Efficiency		75%
Input Frequency		47–63 Hz
Input Current	Full load at low line	1.5Arms, max
Inrush Current	High line, cold start	32A, max
Leakage Current		<1.0mA

OUTPUT SPECIFICATIONS

Output Power	Convection 20 CFM Fan	40W 65W
Hold-Up Time	115V/230V @ 40W	20ms/100ms
Total Regulation	Min to full load V1 V2, V3	 ±2% ±5%
Transient Response	25% step at 0.1A/μs Voltage deviation Recovery time	 5%, max <1ms
OVP	V1 only 5V	135%, ±15%
Short Circuit Protection	Auto Recovery	Short Term
Ripple and Noise ⁴	Peak to peak	Greater of 1% or 50mV
Output Rise Time		<1.0s
Minimum Load ⁵	Main output	10%

Notes

1. Continuous output power is limited to 40W with convection cooling.
2. Peak loading can be applied for 60 secs with <5% duty-cycle.
3. Continuous output power is limited to 65W with 20 CFM fan cooling.
4. Ripple and noise measured at J2 with 10 μF tantalum and 0.1μF ceramic shunt caps.
5. To maintain stated regulation on multiple output units:
 $0.25 \leq (I_1/I_2) \leq 5.0$ and $I_1 > 0.5A$
6. This component level power supply is designed to meet the specified immunity standards.

ENVIRONMENTAL SPECIFICATIONS

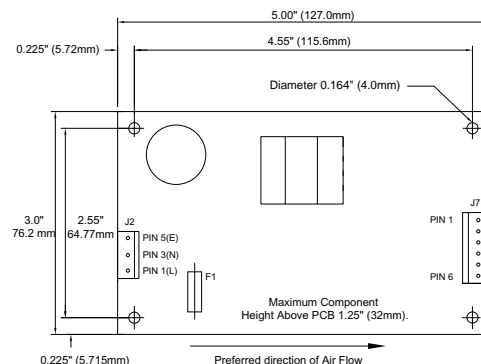
Operating Temperature	Full power ^{1,2,3} Derate to 50% load	0 to 50°C 51 to 70°C
Storage Temperature		–40 to 85°C
Cooling	Convection Fan	40W 65W
Relative Humidity	Non condensing	5% to 95%
MTBF	Demonstrated	>150,000 hrs
Switching Frequency		50kHz, fixed

EMC AND SAFETY SPECIFICATIONS

CE Mark	Complies with the LVD	
EMC	EN55022-B, CISPR22-B, FCC Part 15 Class B, EN50082-1	
Agency Approvals	UL, c-UL, Nemko	
Safety Standards	IEC950, EN60950, UL1950	
Safety File Numbers	Nemko: P98101416 UL: E136019	
Isolation Voltage	Input to output Input to earth	3000 VAC 1500VAC

MECHANICAL SPECIFICATIONS

AC Input Connector J2	Housing Molex 09-50-8051 Pins Molex 08-52-0072
DC Output Connector J7	Housing Molex 09-50-8061 Pins Molex 08-52-0072
Weight	10oz (200g)



INPUT CONNECTOR J2

Pin 1	Live
Pin 2	NC
Pin 3	Neutral
Pin 4	NC
Pin 5	Ground

OUTPUT CONNECTOR J7

	Single	Dual	Triple
Pin 1	V1	V2	V2
Pin 2	V1	V1	V1
Pin 3	V1	V1	V1
Pin 4	Return	Return	Return
Pin 5	Return	Return	Return
Pin 6	Return	Return	V3

Safety and Installation

Safety Declaration

Celetron USA Inc declares under our sole responsibility that all the models listed above are in conformity with the applicable requirements of EN60950: 1991+A1+A2+A3+A4 Safety of Information Technology Equipment per the provisions of the Low Voltage Directive 72/23/EEC of February 19th, 1973 and as amended by 93/68/EEC, Article 13 of July 22nd, 1993.

CE Mark Declaration of Conformity

Celetron USA Inc declares under our sole responsibility that all the models listed above are in conformity with all applicable product directives and may thus carry the CE Mark.

Safety Compliance Standards

All models are certified to be in compliance with the applicable requirements of UL1950 3rd Edition, EN60950 2nd Edition and IEC950 2nd Edition with the following national deviations: Australia, Cenelec, Denmark, Ireland, Germany, Japan, New Zealand, Norway, Sweden, Switzerland and the United Kingdom.

Safety Classification

Protection against electric shock Class 1. Protection against harmful ingress of water - ordinary, no protection. Continuous mode of operation.

Dielectric Strength Test

All units are subject to a production line dielectric strength test at the factory. The primary to secondary test voltage is 4242Vdc and the primary to ground test voltage is 2121Vdc

Safety Isolation and Installation

The creepage distance between primary and ground is 5mm minimum and between primary and secondary is 8mm minimum. Secondary to ground creepage is not defined or controlled. Secondary common is connected to ground using a 0.1uF 50V capacitor. The required creepage and clearance must be maintained to preserve the intended safety function.

Component Temperature and Installation

The maximum operating temperatures of certain safety components must not be exceeded after installation to preserve its intended safety function. The output power, ambient air temperatures and the availability, amount, direction and/or restriction of airflow and orientation of the unit influences the temperature of this unit.