

Switching Power Supply

150W Ultra Low Noise AC/DC Switching Power Supply

GV-24VDC-6ADC

Ultra Low Noise AC/DC Switching Power Supply.

The breakthrough GV series, compact, light-weight, and high-efficient, provides clean DC power with a complex resonant converter.

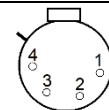
The switching power supply, keeping leakage current, conducted emission, and radiate emission low is an ideal solution for noise-sensitive applications, especially the equipment used in advanced hyperfine measurement, testing and spectrometry & microscopy fields.



- ❖ Reinforced Isolation
- ❖ Medical Standard input-to-output
- ❖ Ultra Low Ripple & Noise (10mV typ.)
- ❖ Low Conducted & Radiated Emission
- ❖ Low Leakage Current (0.15mA at 264V)
- ❖ Safety Standard: 60950-1, 60601-1

Specification

Version	GV-24VDC-6ADC	
Input ¹	Voltage Range	Rating 100 to 240VAC (Range: 85~264VAC)
	Frequency Range	Rating 50 / 60 Hz (Range: 47Hz ~ 63Hz)
	Input Current	100VAC/200VAC 1,9A _{AC} / 1,0A _{AC}
	Inrush Current	100VAC/200VAC 20A _{peak} / 40A _{peak}
	Efficiency	100VAC/200VAC 87% / 89%
	Power Factor	100VAV/200VAC 0,98 / 0,90
	Leakage Current	100VAC/264VAC 0,05mA typ. / 0,15mA typ.
	Connector	IEC Inlet C14
Output	DC Output Voltage	24V _{DC}
	DC Output Voltage Variable Range	Not variable
	Output Current	6,3A _{DC}
	Maximum Output Power	150W
	Line / Load Regulation (max)	96mV / 150mV
	Ripple Noise ²	10mV typ.
	Connector	NEURIK NC4FD-LX-1 Pin 1 & 2 24V _{DC} Pin 2 & 3 Gnd Housing Screen
Feature	OCP / OVP ³	>110% / >115% (Shut down Output)
	Other	No other features available
	Operation Indicator	No internal LED lighting visible outside
Mechanical	Cooling System	Convection
	Size (W x H x D)	105 x 70 x 240mm (without connectors)
	Weight	1,4kg



¹ Conditions: Ta=25°C. Typical value at maximum output power (Inrush current value doesn't include part of within 0.1msec to input filter)

² The typical ripple voltage in the standard specification is a value measured using 100MHz oscilloscope in the anechoic chamber under the JEITA measuring method. (Condition: Ta=25°C, Vin=100Vac. Typical value at rated output)

³ Upon over voltage or over current conditions, input power must be removed to allow unit reset to occur within a few minutes.

Environmental	Operating Temperature	-10°C ~ 40°C
	Humidity ⁴	30%RH ~ 90%RH (non condensing)
	Operating atmospheric pressure range (IEC60601-1)	700hPa ~ 1060hPa
	Storage Temperature	-20°C ~ 85°C
	Humidity	10%RH ~ 95%RH (non condensing)
Vibration Resistance		10m/s ² (10~55Hz 1minute Period / 1hour each X, Y and Z direction)
	Shock Resistance	100m/s ² 11ms (1 time for X, Y and Z direction)
Isolation	Isolation Voltage	INPUT - FG: 2kV _{AC} (20mA) 1min INPUT - OUTPUT: 4kV _{AC} (20mA) 1min OUTPUT - FG: 500V _{AC} (20mA) 1min
	Isolation Resistance	>100MΩ (INPUT-FG, INPUT-OUTPUT, OUTPUT-FG at 500V _{DC})
Others	ESD	EN61000-4-2 compliance
	Radiated Electromagnetic Field	EN61000-4-3 compliance
	Burst	EN61000-4-4 compliance
	Surge	EN61000-4-5 compliance
	Conductive	EN61000-4-6 compliance
	Power Magnetic Field	EN61000-4-8 compliance
	Voltage Drips, Interrupts, Variations	EN61000-4-11 compliance
	Conducted Emission	EN5022, FCC-B, VCCI-B compliance
	Safety Certificates	UL60950-1, CAN/CSA-C22.3 No. 60950-1, EN60950-1 PSE Certification, ANSI/AAMI ES60950-1, CAN/CSA-C22-2 No. 60601-1, EN60601-1 Certification
	UL File (internal SMPS only)	E237238 (UL60950-1), E320635(ES60601-1)
	CE-Marking	Low Voltage Directive
Harmonic Current Characteristic	EN61000-3-2 (Class A) compliance	
Article No.	GV-24V _{DC} -6A _{DC}	B00576010001
	Load Cable	B005760300F1
Load Cable	Length	1,5m
	Connector Power Supply	NEUTRIK NC4MX Pin 1 & 2 = 24V _{DC} Pin 3 & 4 = Gnd Housing = Screen
	Connector Customer	PHOENIX 1776168 Pin 1 = Screen Pin 2 = Gnd Pin 3 = 24V _{DC} Mating customer connector use PHOENIX 1735879 (or similar)
Manufacturer	www.leber-ingenieure.de +49 911 215372 0	Systemtechnik LEBER GmbH & Co.KG Haimendorfer Str. 52 90571 Schwaig / Germany


Danger

- Electrical shock hazard. Do not open. No user serviceable parts inside.
- Indoor use only. Keep device dry and clean.
- Refer Servicing to manufacturer.
- Power Supply handles 150W of energy. Never Leave Devices Unattended.

⁴ Derating is required by operating temperature. Reduce current by 400mA/1°C above 40°C Ambient Temperature.