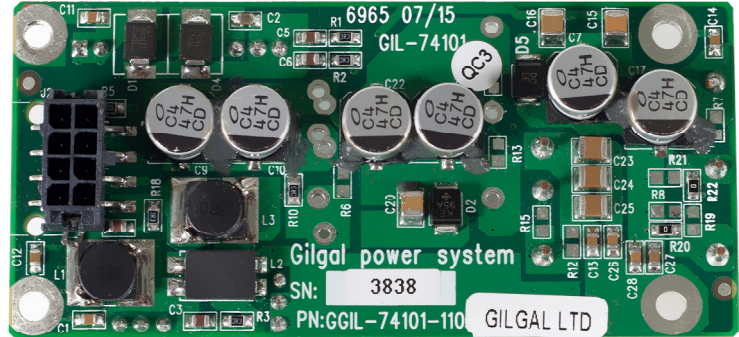




## Military Power Supply

### Model: GIL-74102V-CE

Up to 15w+15w output power  
For 20Watts – contact manufacture.  
9Vdc to 32Vdc Input Voltage  
Output Voltage : 12V & 24V



### Features

- Insolated Outputs voltage.
- Wide input voltage range 9VDC to 32VDC.
- Remote on/off.
- Reverse input voltage protection. Auto recovery.
- Output Current limit.
- Wide temperature range -40°C to +65°C.
- High efficiency.
- Protection against surge & spikes per MIL-STD-1275A&B, MIL-STD-704A÷F.
- Protection against conducted susceptibility and radiated susceptibility per MIL-STD-461.
- Decreases input line Susceptibility emission per MIL-STD-461, CS101.
- Vibration withstand according to MIL-STD-810.

### Applications

- Automotive
- Laptop Adapter
- Industrial
- Military

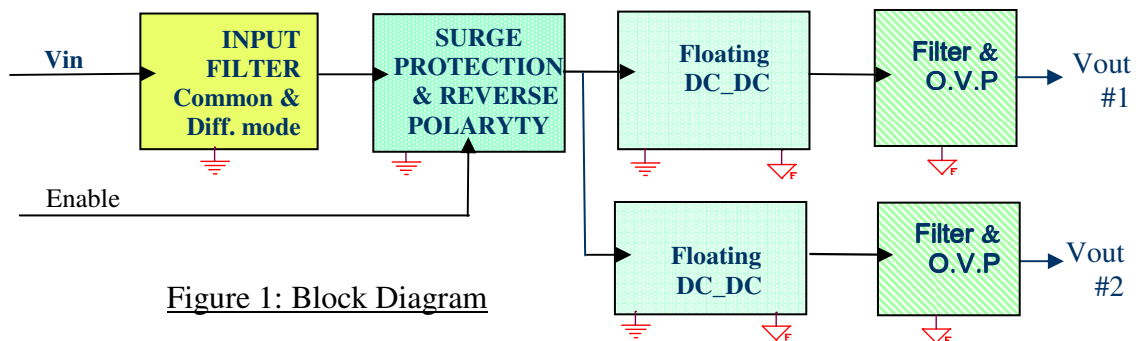


Figure 1: Block Diagram



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**Specification (at 25°C, 75% load, 28V nominal voltage, unless otherwise specified)**

<b>PARAMETER</b>	
<b>Input</b>	
Nominal input voltage:	28v
Input range	9v ÷ 36v
Reverse input protect	Automatic Recovery
Enable	Yes (positive or negative, see how to order)
Meet MIL-1275A/B	Surge – 100v/50ms, 0.5Ω, Spikes – 250v/70us
Meet MIL-704A/F	Surge – 80v/75ms Spikes – 600v/10us
Meet DO160E cat A/Z	Surge – 80v/100ms Spikes – 600v/10us
Meet MIL-461F	CS-101, CS-106,
<b>Output #1</b>	
Output voltage	12V
Output power	Up to 15W (1.25Amp.)
Voltage trim	+/- 10% (only by manufacture)
Voltage Accuracy	+/- 1%
Line Reg. & Load Regulation	+/-1.5% max
Output ripple ( 10MHz )	20mVrms max
Output Current limit	Remove overload for recovery.
<b>Option Output #2</b>	
Output voltage	24V
Output power	15w (0.625Amp.)
Voltage trim	+/- 10% (only by manufacture)
Voltage Accuracy	+/- 1%
Line Reg. & Load Regulation	+/-1.5% max
Output ripple ( 10MHz )	20mVrms max
Output Current limit	Remove overload for recovery.
<b>General</b>	
Power Efficiency	90% typ.
Remote control	Yes (see how to order)
Insolated Output to Input	500vMin
Weight (typ.)	70 gr.
<b>Environmental</b>	
Temperature	-40 + 65°C , Operational Base Plate
MIL-STD-810G, Methods 501.5,502.5	-40 + 95°C , Storage
Vibration	MIL-STD-810G, Method 514.5
SHOCK ,MIL-STD-810G	SRS Shock of 40g's 15-23 msec @ cross over Freq
Method 516.5 –Ground equipment	-45 Hz per Table 516.6-I , Operational
VIBRATION , MIL-STD-810G	
Trucks & Trailers.	Cat. 4. Secured Cargo
Transportation	Cat. 5. Loose Cargo (with its transit case)



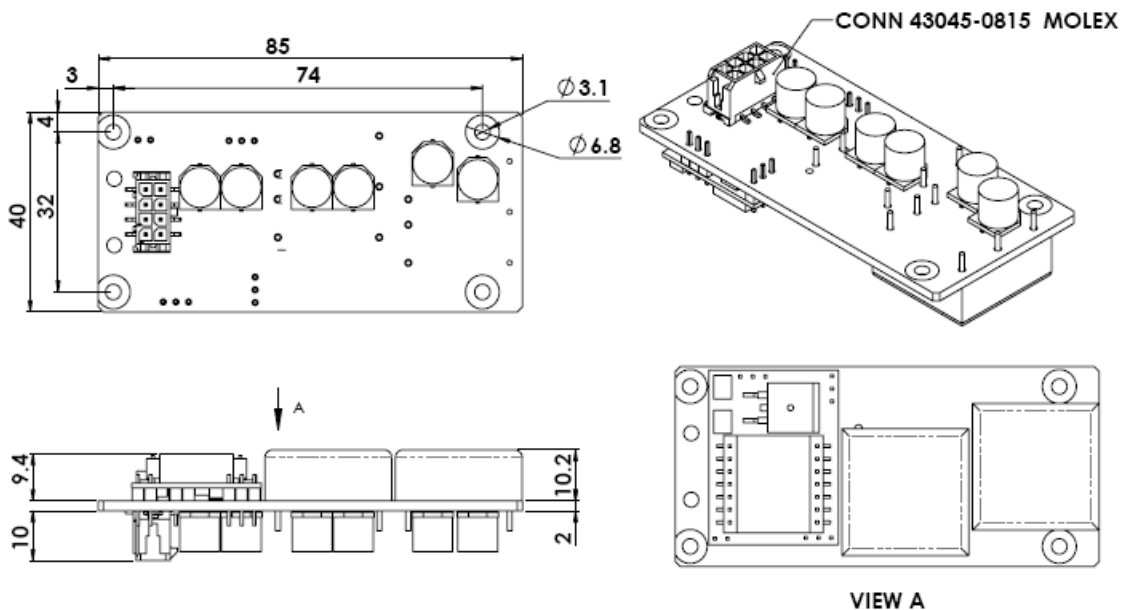
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Connector	Pin Number	Function	Description
INPUT	J1/1	Vin	+Input voltage
	J1/5	GND	Input Return
OUTPUT	J1/2	+12V	Output voltage
	J1/6	+12V	Output voltage
	J1/3	GND out	Output GND
	J1/7	GND out	Output GND
	J1/8	+24V	Output voltage
ON/OFF	J1/4	ENABLE	En control

**Table 1: Pin Connection and function**

Connector: MOLEX PN: **43045-0815**.

Dimensions:  $\pm 0.2$



Mounting hole size: (4) Screw # 4/40

### **How to Order:**

- ❖ GIL-74102V-CE,
- ❖ Enable: "On" = Leave open. "Off" = Short to GND. ( $V_{EN}$  (at "On") = 1.2v)

**For other options and additional information please contact Gilgal.**

### **General comments:**

1. **Warranty: 2 year.**
2. Specification subject to change without notice.

Information furnished by Gilgal power systems believed to be accurate and reliable.

However, no responsibility is assumed for its use. Gilgal power systems make no representation that the interconnection of its circuits as described herein will not infringe on existing patent rights.

All information stated in this sheet is under the terms mentioned in the SLA on Gilgal's website – [www.gilgalpower.com](http://www.gilgalpower.com)