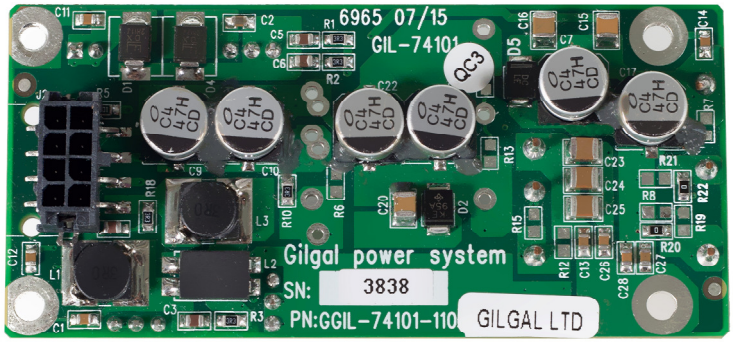
GILGAL Power Systems Ltd.

Military Power Supply

Model: GIL-74103V-C0

Up to 60w output power
9Vdc to 32Vdc Input Voltage
Output Voltage : 12V



Features

- Insolated Output 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

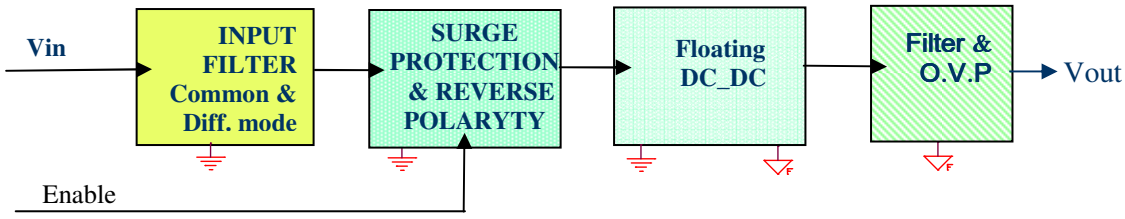


Figure 1: Block Diagram

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

PARAMETER	
Input	
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,
Output #1	
Output voltage	12V
Output power	Up to 60W (5Amp.)
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.
General	
Power Efficiency	87% typ.
Remote control	Yes (see how to order)
Insolated Output to Input	500vMin
Weight (typ.)	75 gr.
Environmental	
Temperature MIL-STD-810G, Methods 501.5,502.5	-40 + 65˚C , Operational Base Plate
	-40 + 95˚C , Storage
Vibration	MIL-STD-810G, Method 514.5
SHOCK ,MIL-STD-810G Method 516.5 – Ground equipment	SRS Shock of 40g's 15-23 msec @ cross over Freq -45 Hz per Table 516.6-I , Operational
VIBRATION , MIL-STD-810G	
Trucks & Trailers. Transportation	Cat. 4. Secured Cargo Cat. 5. Loose Cargo (with its transit case)

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	Un use	Un use
ON/OFF	J1/4	ENABLE	En control

Table 1: Pin Connection and function

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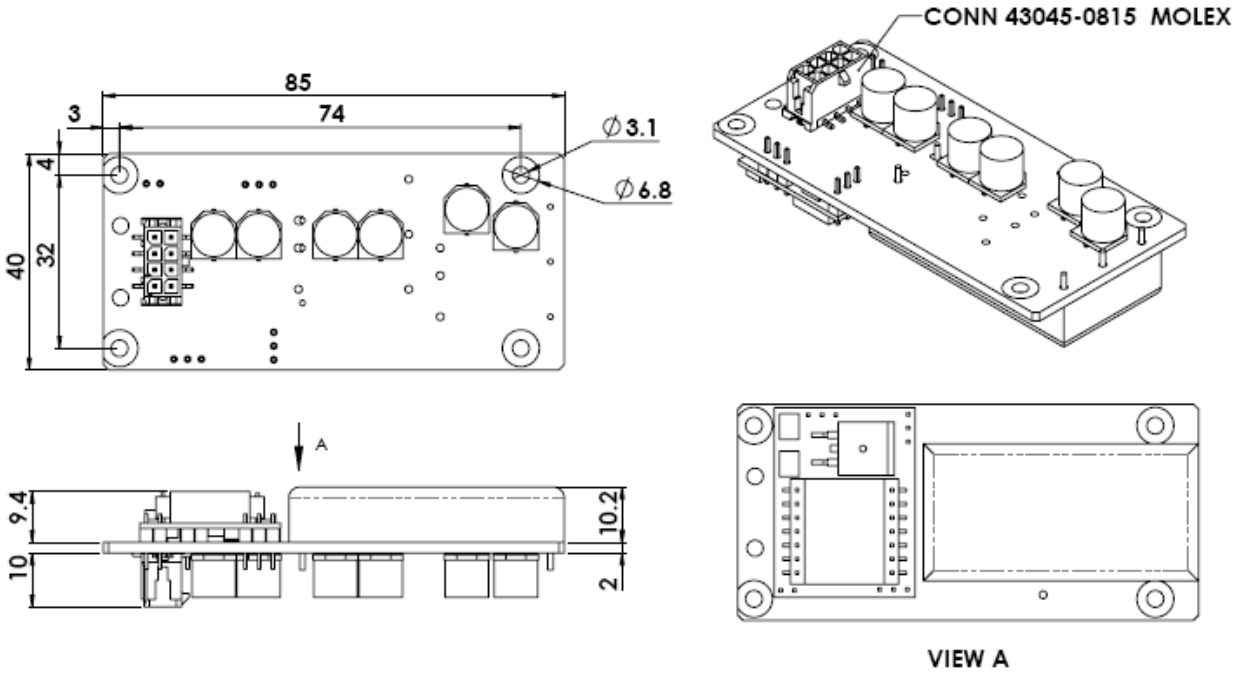
Connector: MOLEX PN: **430450815.**
Dimensions: ±0.2
Mounting hole size: (4) Screw # 4/40



How to Order:

- GIL-74103V-C0 ,
- 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.

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