



Military Power Supply

Model: GIL76120-CBA

Up to 120W output power
 18Vds to 32Vdc Input Voltage
 Output Voltage #1 : 12V
 Output Voltage #2 : 5V
 Output Voltage #3 : 3V3



Features

- Insolated Outputs voltage.
- Output power – up to 120W.
- Wide input voltage range 18VDC to 32VDC
- Remote on/off.
- Reverse input voltage protection. Auto recovery.
- Output Current limit for each output.
- Wide operating temperature range -40°C to +65°C.
- **Measurement all Voltages & Currents through I²C (AD7997B)**
- O.U.V. indication
- **High efficiency up to 88%.**
- Protection against surge & spikes per MIL-STD-1275A&B, MIL-STD-704A÷E.
- 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
- Industrial
- Military

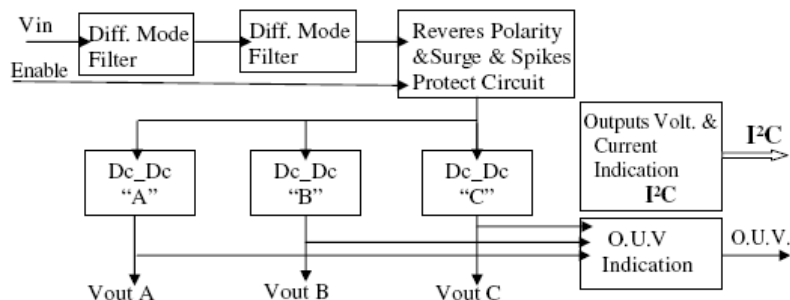


Figure 1: Block Diagram



GILGAL Power Systems Ltd.

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

PARAMETER	
Input	
Nominal input voltage:	28v
Input range	18v ÷ 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 96W (8Amp.)
Voltage trim	+/- 10% (only by manufacture)
Voltage Accuracy	+/- 1%
Line Reg. & Load Regulation	+/-1.5% max
Output ripple (10MHz)	30mVrms max
Output Current limit	Remove overload for recovery.
Option Output #2	
Output voltage	3v3 or 5v or 12v or 15v
Output power	15w or 20w
Voltage trim	+/- 10% (only by manufacture)
Voltage Accuracy	+/- 1%
Line Reg. & Load Regulation	+/-1.5% max
Output ripple (10MHz)	25mVrms max
Output Current limit	Remove overload for recovery.
Option Output #3	
Output voltage	3v3 or 5v or 12v or 15v
Output power	15w or 20w
Voltage trim	+/- 10% (only by manufacture)
Voltage Accuracy	+/- 1%
Line Reg. & Load Regulation	+/-1.5% max
Output ripple (10MHz)	25mVrms max
Output Current limit	Remove overload for recovery.
General	
Power Efficiency (typ.)	88%
Remote control	Yes (see how to order)
Insolated Output to Input	500vMin
Case coating	Anodize
Weight (typ.)	460 gr.
Environmental	
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
Method 516.5 –Ground equipment	Freq -45 Hz per Table 516.6-l , Operational
VIBRATION , MIL-STD-810G	
Trucks & Trailers.	Cat. 4. Secured Cargo
Transportation	Cat. 5. Loose Cargo (with its transit case)
Aircraft , Operational	Cat. 20 Ground Vehicles



GILGAL Power Systems Ltd.

Physical

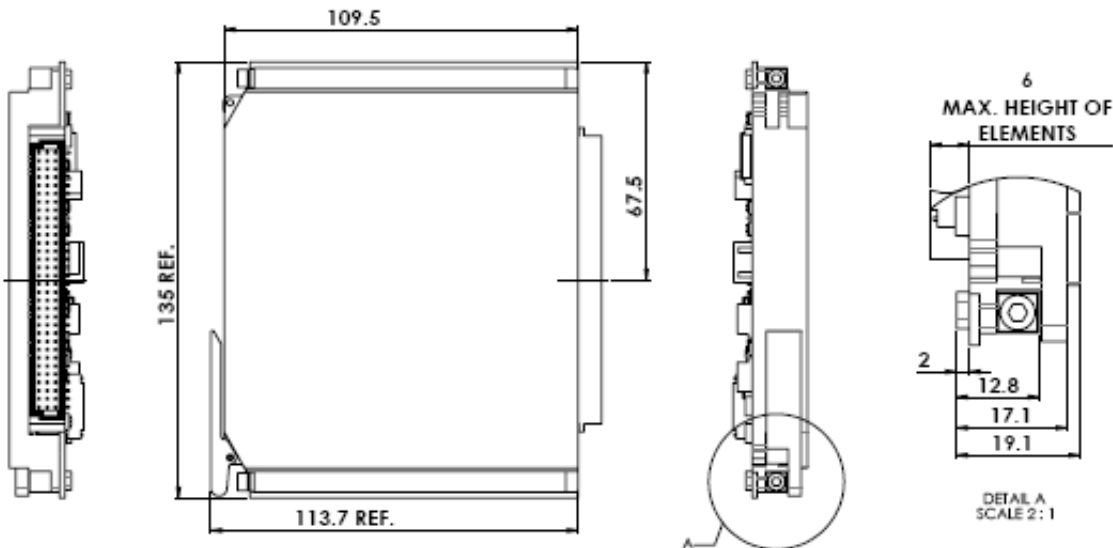
- connector: DIN41612 STYLE M 42+8 pin male

Pin No.	Description	Pin No.	Description	Pin No.	Description
A13	GND	B13	GND_out	C13	GND_out
A14	NC	B14	NC	C14	O.U.V. Indication
A15	Inhibit	B15	NC	C15	NC
A16	NC	B16	+28v_input	C16	+28v_input
A17	GND_out	B17	GND_in	C17	GND_in
A18	+3v3	B18	NC	C18	+3v3
A19	+12v	B19	+12v	C19	+12v
A20	+5v	B20	+5v	C20	+5v
B2	+5v	B22	GND_out		
B5	GND_out	B25	CHASSIS		
B8	+3v3	B28	+28v_input		
B11	+12v	B31	GND_in		

Table 1: Pin Connection and function

- O.U.V. Indication: Normality mode - open Collector. Failure mode -GND

Dimensions:



How to Order:

GIL-76120-CBA, (for 12v/8Amp, 5v/3A, 3v3/4A)

For other outputs voltage – please connect to the factory.

	3v3	5v	12v	15v
Option Output #2	A	B	C	D
Option Output #3	A	B	C	D

NOTES:

- Warranty: 2 year.
- 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