



GS09AC-FRC

POWER SUPPLY MODULE FOR STB

REV. 01

Type	V _i	V _o	P _o
GS09AC-FRC	180<V _{ac} <264 V _{rms}	2.5V	0.75A
		3.3V	0.3A
		5V	0.4A
		7.3V	0.5A
		12V	50mA
		33	10mA



ORDERING NUMBER: GS09AC-FRC

FEATURE

- OPEN FRAME AC/DC SWITCHING MODE POWER SUPPLY FOR SET TOP BOX APPLICATION
- LINE VOLTAGE EUROPEAN STANDARD 230 V_{ac}
- 6 INSULATED MAIN OUTPUTS, MAX 10W
- PEAK INPUT OVERVOLTAGE WITH STANDING
- INPUT FUSE RESISTOR ON ACMAIN INPUT
- INPUTS TO OUTPUTS INSULATION
- DESIGNED TO COMPLY WITH EN60950 E EN60065 SAFETY REQUIREMENTS
- INPUT FILTER TO MEET EMC REQUIREMENTS ACCORDING TO EN55022 CLASS B
- EFFICIENCY>70%
- MECHANICAL DIMENSIONS (LxWxH):130x50x30 mm

DESCRIPTION

The GS09AC-FRC Switching Mode Power Supply is a comprehensive solution, performing AC-DC conversion and regulation functions.

Designed for a variety of residential user applications, this open frame solution performs up to 10W output power.

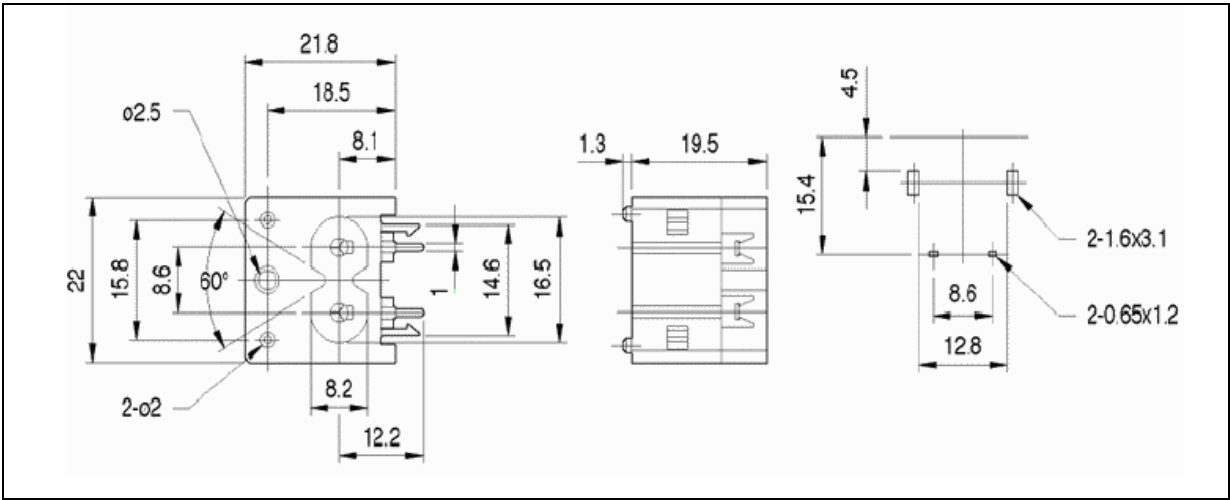
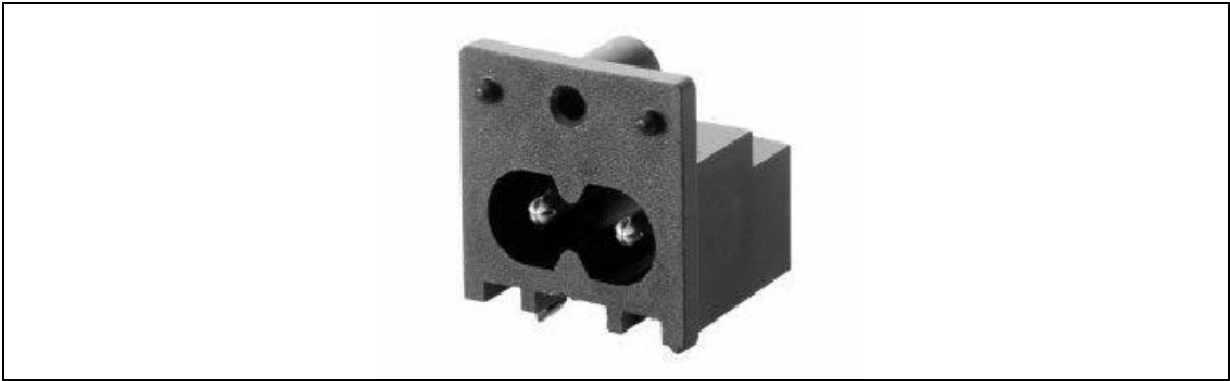
Connected to the main via J1 2 poles AC connector, the GS09AC-FRC performs a high efficiency AC/DC conversion to generate 6 regulated DC outputs available at the J2 DC 10 poles connector.

ELECTRICAL CHARACTERISTICS when in **NPM** ($T_{amb}=25^{\circ}\text{C}$, unless otherwise specified.)**Standard Condition:** $V_{ac}=85$ to $254 V_{rms}$

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
V_{ac}	AC Input Voltage		180		264	V_{rms}
f_i	V_{ac} Input Frequency	$V_{ac}=230 V_{rms}$	50		60	Hz
V_{acst}	Start up Input voltage	Output parameters as per Standard Condition			180	V_{rms}
V_{o1}	Output Voltage 1	Standard condition	2.375	2.5	2.623	V
V_{o2}	Output Voltage 2	Standard condition	3.135	3.3	3.465	V
V_{o3}	Output Voltage 3	Standard condition	4.75	5	5.25	V
V_{o4}	Output Voltage 4	Standard condition	6.57	7.3	8.03	V
V_{o5}	Output Voltage 5	Standard condition	11.4	12	12.6	V
V_{o6}	Output Voltage 6	Standard condition	29.7	33	36.3	V
I_{o1}	Output Current V_{o1}	Standard condition	510		750	mA
I_{o2}	Output Current V_{o2}	Standard condition	200		300	mA
I_{o3}	Output Current V_{o3}	Standard condition	200		400	mA
I_{o4}	Output Current V_{o4}	Standard condition	360		500	mA
I_{o5}	Output Current V_{o5}	Standard condition	25		50	mA
I_{o6}	Output Current V_{o6}	Standard condition	6		10	mA
V_{or1}	Output Voltage V_{o1} Ripple	Standard Condition			10	mVrms
V_{or2}	Output Voltage V_{o2} Ripple	Standard Condition			10	mVrms
V_{or3}	Output Voltage V_{o3} Ripple	Standard Condition			10	mVrms
V_{or4}	Output Voltage V_{o4} Ripple	Standard Condition			10	mVrms
V_{is}	Insulation Voltage	Input V_{ac} to outputs $t=60s$ as per EN60950	3000			V_{rms}
th	Hold-up time	$V_{ac}=180$	20			ms
MTBF	Mean Time Before Failure	Ground Fixed, MIL-HDBK-217E	50			Kh
T_{op}	Oper. Ambient Temperature		-5		+65	$^{\circ}\text{C}$
I_{rsh}	In rush current				15	A

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Input connector: KUNMING HJC-034



PIN CONFIGURATION

Pin No	Signal	Pin No	Signal
1	33V	6	GND
2	12V	7	GND
3	7.3V	8	3.3V
4	5V	9	2.5V
5	GND	10	2.5V

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