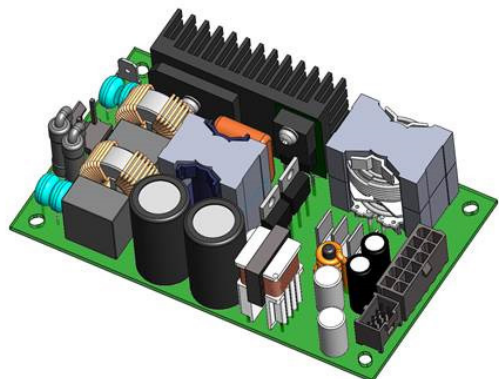


# PQC250 open frame power supply

## 3" x 5" Open Frame Chassis Mounted 250W AC-DC power supply



### Features

- IEC60601 Ed.3 medical (2 x MOPP Pri-Sec; 1 x MOPP Pri-Chassis Ground)  
IEC62368 (Combined IEC60950 & IEC60065)
- Designed to comply with IEC60601-1 4th Edition EMC Standard Requirements\*
- 250W compact high density; operation to 250W at +50°C
- Very low no load standby power; designed to meet ENERGY STAR® program requirements for single voltage external AC-DC power supplies
- True zero load operation of the Main (V1) output; no minimum load requirements; correct PS\_OK functionality maintained
- 3" x 5" industry standard footprint
- High efficiency; 93.0% typical
- Remote sense
- Universal AC input with active PFC
- Less than 1U high
- Isolated 5V@1A auxiliary/standby output
- RoHS compliant
- Active inrush protection
- Backward compatibility with MVAC250 series products
- Droop current share variant (planned)
- Two year standard warranty

\* When deployed in End User Systems)

### Overview

Murata is pleased to announce that their next generation of 250W open frame power supplies from Murata Power Solutions is currently in development. The PQC250 provides an enhancement to its successful and universally established MVAC250 product series.

Available with ITE, consumer, industrial, and medical safety certification, the PQC offers upgraded performance and backward compatibility with the MVAC250 series. Offering a fully rated 250W of convection cooled capability up to +50°C (no derating with input line) this next generation product will offer a technically superior solution at a very competitive market price.

Model Number	Output Power Capability		Main Output (V1)		Aux Output (V2)
	Natural Convection	Forced Air Cooling			
PQC250-12xxx	250W	TBD	12V	20.8A	5V@1A
PQC250-15xxx			15V	16.7A	
PQC250-18xxx			18V	13.9A	
PQC250-24xxx			24V	10.4A	
PQC250-28xxx			28V	8.9A	
PQC250-36xxx			36V	6.9A	
PQC250-48xxx			48V	5.2A	

Input Characteristics					
Parameter	Conditions	Min	Nom	Max	Units
Input Voltage Operating Range	Single Phase	90	100/240	264	Vac
	DC	120		390	Vdc
Input Frequency		47	50/60	63	Hz
Maximum input current	Vin = 90Vac; Full Load			3.4	Arms
Inrush Current	Cold start between 0 to 200msec		15		Apk
Power Factor	At 230Vac, full load		0.99		W/VA
Hold-up Time	230Vac; Full Load	16			msec
Efficiency	20% Full Load		89		
	50% Full Load		93		
	100% Full Load		93		
No Load Input Power Consumption	(PS_ON = OFF; Aux (V2) = 0A)			<0.5W	W

Output Characteristics					
Parameter	Conditions	Min	Nom	Max	Units
Line, Load Regulation	Main (V1) Output			±1	%
	Aux (V2) Output			±5	
Over Voltage Protection	Main (V1) Output; Latching	110		125	%
	Aux (V2) Output; Latching	5.5		7.5	
Over Current Protection			TBD		%Amax
Minimum Load Capability	Stable Operation	0			A
Output Ripple	Zero to Full Load			1	%

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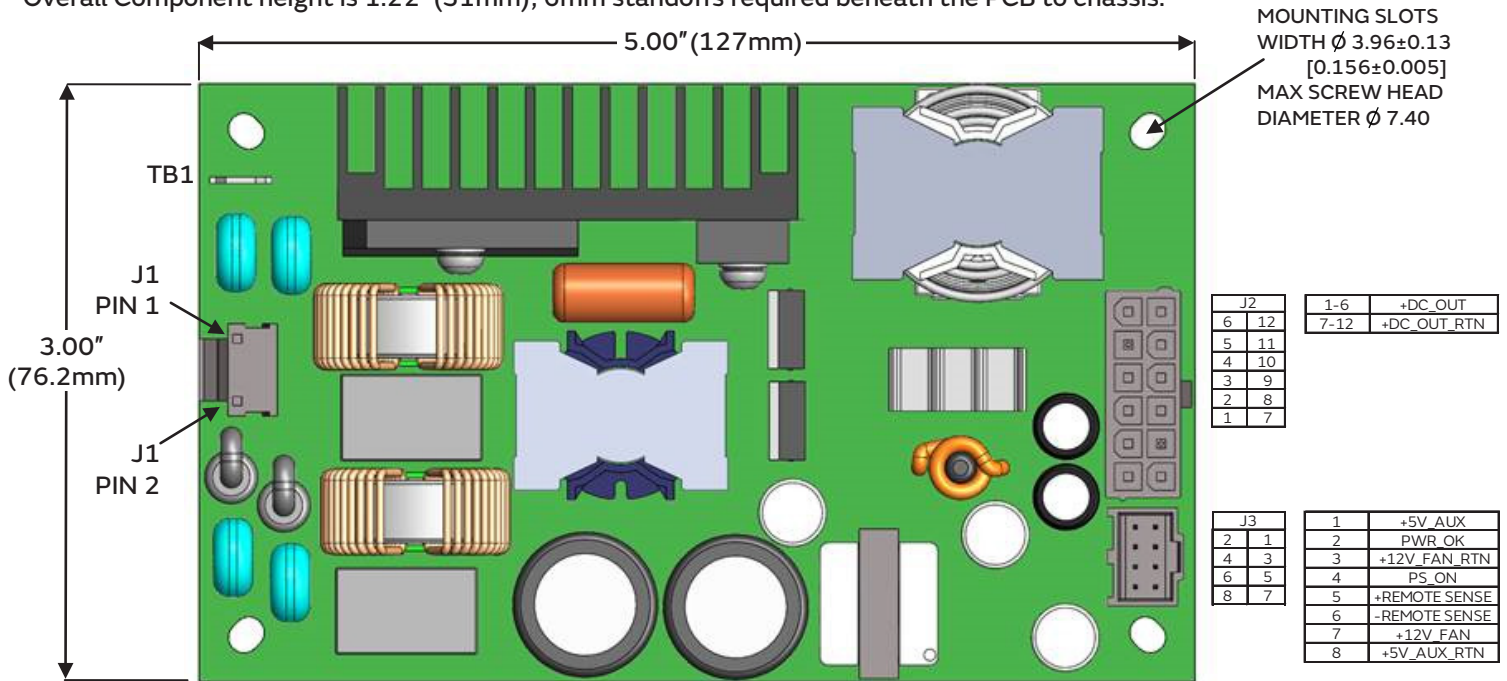
## 3" x 5" Open Frame Chassis Mounted 250W AC-DC power supply

Environmental					
Parameter	Conditions	Min	Nom	Max	Units
Storage Temp Range		-40		85	°C
Operating Temp Range		-20		50/70*	
EMI Compliance	Conducted; EN55022/FCC Part 15	Class B			
	Radiated; EN55022/FCC Part 15	Class A			
Medical Safety; supports 2xMOPP Pri-Sec; 1xMOPP Pri-Chassis/Ground					

\*Derating will apply

### Mechanical Details

Overall Component height is 1.22" (31mm); 6mm standoffs required beneath the PCB to chassis.



For full details go to  
[www.murata-ps.com/rohs](http://www.murata-ps.com/rohs)



This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy. Refer to: <http://www.murata-ps.com/requirements/>

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