

Product Sales Sheet



RQ1BxxxHZ
EN 50155 Compliant
Half-brick

Rail Grade DC-DC Power Supply

66-160 V Input Voltage	200 V Transient Input	5, 12, 15, 24, 48 Vdc Output Voltage	500 W Output Power	Up to 95% Full Load Efficiency
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Operating Temperature: -40°C to +100°C



Designed and manufactured in the USA

Key Features

- Meets requirements of standard EN 50155
- Delivers full power with minimal derating
- Fixed frequency switching provides predictable EMI
- No minimum load requirement
- Input under-voltage lockout
- Output current limit and short circuit protection
- Active back bias protection
- Output over-voltage protection
- Thermal shutdown
- On/Off control referenced to input side
- Remote sense for the output voltage
- Output voltage trim range of -20%, +10%
- Full feature option available for use of multiple converters in parallel

Where to Sell

- Target Application: High speed train head-lighting (LED matrix), High speed train signal lamp, Lighting system in carriage, Auxiliary Power Supply in Electric Locomotive and EMU

Safety Features

- Input-to-output isolation - 2000 Vrms
- UL 60950-1
- CAN/CSA-C22.2 No. 60950-1
- EN60950-1
- CE Marked
- EN45545-2 R24/R25 Compliant

Competition

- Belfuse Power
- Vicor
- Local China brands
- Cincon
- P-Duke

ROM Pricing & Lead Time

- \$341.94 for quantity 1-24
- \$307.74 for quantity 25-99
- Lead time = 8-12 Weeks ARO

SynQor Advantages

- Higher power density in a half-brick package
- Wide input voltage range
- Ability to parallel for higher power applications
- EN50155 Compliance
- High efficiency across the complete power range

Part Number Scheme

Datasheet Link: RailQor 1B Datasheet

Family	Input	Output	Package Size	Thermal Design	Output Current	Enable Logic	Pin Style	Feature
RQ	1B: 66-160 V, 200 V trans	050: 5 V 120: 12 V 150: 15 V 240: 24 V 480: 48 V	HZ: Half-brick Zeta	C: Encased D: Encased with Non-Threaded Baseplate V: Encased with Flanged Baseplate	70: 70 A 42: 42 A 33: 33.6 A 21: 21 A 10: 10.5 A	N: Negative	R: 0.180"	S: Standard F: Full Feature

Example: RQ1B050HZC70NRF-G