

RQB60W12 Series:

60W 1/4 Brick 14~160Vdc Ultra-Wide Input




Railway DC/DC Converter

Product Strategy Center/Frank Chen

MEAN WELL has been working on railway telematics for years, the 8~500W encapsulated module type, enclosed type, and DIN rail type have been widely praised within the industry (details in the table below). To meet the demand for a wider voltage input range, we're introducing the newly launched encapsulated module of 1/4 brick 60W 12:1 (14~160 Vdc) ultra-wide voltage input RQB60W12 series.

Main features: 14~160 Vdc ultra-wide voltage input can cover the mainstream nominal voltages of global railway systems: 24/36/48/72/96/110 Vdc, operate under extreme environments of -40~+90°C, an external capacitor can be added to ensure the hold-up time would last for 10~30 ms while the DC input is temporarily unstable, 2KVac/3KVdc high isolation withstand voltage, complete protections, etc. It is very suitable for industries such as railways, trams, MRTs, buses and information networks, industrial control automation, communication equipment and double-layer isolation requirements, DC UPS systems, battery voltage conversion or voltage stabilization...etc.

DC-DC Converter Selection Guide for Railway Application

Mounting Type		Series Name	Main Specifications					
			Watt (W)	Input Voltage (Vdc)	Output Voltage (Vdc)	Operating Temp.	Safety	Dimension (L x W x H)
<div>Encapsulated Modules (PCB mount)</div> <div></div>	DIP24	RSDW/RDDW08	8 W	(4:1) 9~36V 18~75V	Single : 3.3 / 5 / 12 / 15V Dual : ±5 / 12 / 15V	-40 ~ +85°C	EAC/CE/UKCA (EN50155/ EN55032)	31.8*20.8*10.2 mm
		RSDW/RDDW10	10W	(4:1) 43~160V				50.8*25.4*10.2 mm
	2" x 1"	RSDW/RDDW20	20W	Single : 5 / 12 / 15V Dual : ±12 / 15 / 24V				
		RSDW/RDDW20UW	20W		Single : 3.3 / 5 / 12 / 15 / 24 / 48V Dual : ±12 / 15V			
		RSDW/RDDW40	40W	(4:1) 9~36V 18~75V 40~160V				
		RSDW/RDDW60	60W		-40 ~ +90°C			
	¼ Brick	RQB40W12	40W	(12:1) 14~160V		Single : 5 / 12 / 24 / 48 / 54V		
		RQB60W12 NEW	60W	Single : 12 / 24 / 48 / 54V				
		RQB150W3	150W		(3:1) 66~160V			
<div>Enclosed Type (Terminal block)</div> <div></div>		RSD-30	30W	(4:1) 9~36V 18~72V	Single : 3.3 / 5 / 12 / 15 / 24V	-40 ~ +70°C	CB/UL 62368-1 EAC/CE/UKCA (EN50155/ EN55032)	113*60*25 mm
		RSD-60	60W	40~160V				128*60*25 mm
		RSD-100	100W	(2:1) 14.4~33.6V 28.8~67.2V 57.6~154V	Single : 5 / 12 / 24V			161*68*36 mm
		RSD-150	150W		Single : 12 / 24 / 48V			189*77*36 mm
		RSD-200	200W					Single : 5 / 12 / 24 / 48V
		RSD-300	300W		Single : 12 / 24 / 48V			
		RSD-500	500W			-40 ~ +80°C	237*100*41 mm	
		<div>Din Rail Type (Rail mount)</div> <div></div>		DDR-120	120W	(2:1) 9~18V	Single : 12 / 24 / 48V	-40 ~ +70°C
DDR-240	240W			16.8~33.6V 28.8~67.2V	Single : 24 / 48V	-40 ~ +80°C	EAC/CE/UKCA (EN50155/ EN55032)	40*125.2*113.5 mm
DDR-480	480W			57.6~154V	Single : 12 / 24 / 48V			85.5*125.2*128.5 mm

Features

- 12:1 (14~160Vdc) ultra-wide input range
- Fully encapsulated internal module: Shock-proof, dust-proof and moisture-proof
- -40 ~ +90°C ultra-wide operating temperature
- Input/output isolation: 2KVac or 3KVdc
- Protection functions: Short Circuit, Overload, Overvoltage, Over Temperature, Input Undervoltage Protection
- Remote ON/OFF control
- Output voltage adjustable ± 10%
- Compliance certifications:
 - Railway: EN50155/EN50121-3-2
 - Information: UL62368-1, EAC, CE, UKCA
- Ultra-thin and low profile, dimensions (length x width x height): 57.9 x 36.8 x 12.7 mm
- 3 years warranty

Applications



Order information

RQB 60 W12 - 110 S 05

Output voltage (5/12/24/48/54Vdc)

Single output

Typical input voltage (110Vdc)

12:1 ultra-wide input voltage (14~160Vdc)

Rated wattage

Series name