

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)			
Encapsulated Modules (PCB mount)	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						
	2" x 1"	RSDW/RDDW20	20W (18:1) 8.5~160V	Single : 5 / 12 / 15V Dual : ±12 / 15 / 24V			50.8*25.4*10.2 mm		
		RSDW/RDDW20UW	20W (4:1) 9~36V 18~75V 40~160V	Single : 3.3 / 5 / 12 / 15 / 24 / 48V Dual : ±12 / 15V					
		RSDW/RDDW40	40W (3:1) 66~160V	Single : 5 / 12 / 15 / 24 / 48V Dual : ±12 / 15V					
	1/4 Brick	RSDW/RDDW60	60W (12:1) 14~160V	Single : 5 / 12 / 24 / 48 / 54V	-40 ~ +90°C	UL62368-1/(40W), EAC/CE/UKCA (EN50155/ EN55032)	57.9*36.8*12.7mm		
		RQB40W12	40W (12:1) 14~160V	Single : 5 / 12 / 24 / 48 / 54V					
		RQB60W12 NEW	60W (3:1) 66~160V	Single : 12 / 24 / 48 / 54V					
Enclosed Type (Terminal block)	RSD-30	30W (4:1) 9~36V 18~72V 40~160V	Single : 3.3 / 5 / 12 / 15 / 24V	-40 ~ +70°C	CB/UL 62368-1 EAC/CE/UKCA (EN50155/ EN55032)	113*60*25 mm 128*60*25 mm 161*68*36 mm 189*77*36 mm 191*86*40 mm 216*96.5*40 mm 237*100*41 mm			
	RSD-60	60W (2:1) 14.4~33.6V 28.8~67.2V 57.6~154V	Single : 5 / 12 / 24V						
	RSD-100	100W (2:1) 14.4~33.6V 28.8~67.2V 57.6~154V	Single : 12 / 24 / 48V						
	RSD-150	150W (2:1) 14.4~33.6V 28.8~67.2V 57.6~154V	Single : 5 / 12 / 24 / 48V						
	RSD-200	200W (2:1) 14.4~33.6V 28.8~67.2V 57.6~154V	Single : 12 / 24 / 48V						
	RSD-300	300W (2:1) 14.4~33.6V 28.8~67.2V 57.6~154V	Single : 12 / 24 / 48V						
	RSD-500	500W (2:1) 14.4~33.6V 28.8~67.2V 57.6~154V	Single : 12 / 24 / 48V						
Din Rail Type (Rail mount)	DDR-120	120W (2:1) 9~18V 16.8~33.6V	Single : 12 / 24 / 48V	-40 ~ +70°C	CB/UL 62368-1 EAC/CE/UKCA (EN50155/ EN55032)	32*125.2*102 mm 40*125.2*113.5 mm			
	DDR-240	240W (2:1) 16.8~33.6V 28.8~67.2V	Single : 24 / 48V						
	DDR-480	480W (2:1) 16.8~33.6V 28.8~67.2V 57.6~154V	Single : 12 / 24 / 48V						

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

