

# EPS series DC/DC Transit Converter

The EPS series of DC/DC converter provides stable and reliable DC to DC power conversion for Transit application.

It meets most train shock, vibration and EMC Standards with CE marking on the converter module itself

## Features

- Compact DC/DC power modules
- Wide variety of Input and Output options
- High power density
- Natural conduction air cooled
- (N+1) parallel redundant options available



Converter in 19" cassette



Converter PCB module



Converter in Desktop enclosure



Converter in IP54 enclosure

## Technical specifications

Input Voltage	24VDC (18 - 36V)/ 48VDC (36 - 76V) / 110VDC (82 -185V) / 280VDC (200 - 400V) & 230VAC (85-265VAC)
Input Protection	Reverse Polarity Protection
Efficiency	Up to 90%
Output Voltage	5 - 28VDC, Refer to Selection Table
Output voltage range	± 10% (adjustable By TRM terminal and external resistor)
Output Voltage Stability	± 1 %
Efficiency	70% for 3.3Vdc output to >80% for other output options
Output Power	50 -1500 Watts, Refer to Output Selection table
Ripple & Noise	2% (20MHZ Bandwidth Scope)
Load Regulation	1.5%
Line Regulation	0.5%
Withstand voltage	Input to Output: 2KVAC
Isolation resistance	More than 100MΩ @ 25°C & 70% RH, Output to Baseplate: 500Vdc
Safety standard	Comply to EN60950
EMC standard	Comply to VCCI Conducted/ Radiated Class A
Shock and Vibration standard	Comply to IEC571
Protection	Input/ Output fuse, Over-voltage protection, Over-current, Thermal protection, Tropical protection
Parallel Operation	F option only
Build-in Blocking Diode	Optional
Output Fail signal	Optional
Operating Temperature	0 to 50°C, High temperature allowable with Power derating
Cooling	Convection or Internal Forced Air
IP protection	In accordance to enclosure option, IEC529 IP00 to IP54
Operating temperature	-10°C to +50°C, Output derating for higher temperature
Relative Humidity	Up to 95%, Non-condensing
Dimensions	PCB assemble board (P) / Desktop Enclosure (D) / IP54 Wall mount enclosure (W) / 19" EURO-RACK Cassette (C) / 19" rack-mount (R)
Weight	Model dependant
Warranty	18 months, includes parts & labour

## Output Selection Table

MODEL	INPUT VDC	OUTPUT	
		VDC	A
EPSS50S24-5	24	5	10.0
EPS50S24-12	24	12	4.2
EPS50S24.15	24	15	3.4
EPS50S24-24	24	24	2.1
EPS50S24-28	24	28	1.8
EPS300F24-5	24	5	20.0
EPS300F24-12	24	12	20.0
EPS300F24-15	24	15	10.8
EPS300F24-24	24	24	10.8
EPS300F24-28	24	28	10.8
EPS500F24-12	24	12	42.0
EPS500F24-24	24	24	18.0
EPS500F24 28	24	28	18.0
EPS600F24.24	24	24	21.5
EPS1000F24-12	24	12	84.0
EPS1000F24-24	24	24	40.0
EPS1000F24-28	24	28	36.0
EPS1500F24-12	24	12	125.0
EPS1500F24-24	24	24	60.0
EPS1500F24-28	24	28	54.0
EPS50S48-5	48	5	10.0
EPS50S48-12	48	12	4.3
EPS50S48-15	48	15	3.4
EPS50S48-24	48	24	2.1
EPS50S48-28	48	28	1.8
EPS75S48-12	48	12	6.3
EPS75S48-15	48	15	5.0
EPS75S48-24	48	24	3.2
EPS75S48-28	48	28	2.7
EPS300F48-5	48	5	50.0
EPS300F48-12	48	12	25.0
EPS300F48-15	48	15	20.0
EPS300F48-24	48	24	12.6
EPS300F48-28	48	28	10.8
EPS500F48-12	48	12	42.0
EPS500F48 24	48	24	18.0
EPS500F48-28	48	28	18.0

Model	INPUT VDC	OUTPUT	
		VDC	A
EPS600F48-12	48	12	50.0
EPS600F48-15	48	24	21.5
EPS600F48-24	48	28	21.5
EPS1000F48-12	48	12	84.0
EPS1000F48-24	48	24	40.0
EPS1000F48-28	48	28	40.0
EPS1500F48-12	48	12	125.0
EPS1500F48-24	48	24	60.0
EPS1500F48-28	48	48	60.0
EPS50S110-5	110	5	10.0
EPS50S110-12	110	12	4.2
EPS50S110-15	110	15	3.4
EP50S110-24	110	24	2.1
EP50S110-28	110	28	1.8
EPS75S110-12	110	12	6.3
EPS75S1 10-15	110	15	5.0
EPS75S110-24	110	24	3.2
EPS75S110-28	110	28	2.7
EPS300F110-5	110	5	50.0
EPS300F110.12	110	12	25.0
EPS300F110-15	110	15	20.0
EPS300F110-24	110	24	12.6
EPS300F110-28	110	28	10.8
EPS50S280-5	280	5	10.0
EPS50S280-12	280	12	4.2
EPS50S280-15	280	15	3.4
EPS50S280-24	280	24	2.1
EPS50S280-28	280	28	1.8
EPS75S280-12	280	12	6.3
EPS75S280-15	280	15	5.0
EPS75S280-24	280	24	3.2
EPS75S280.28	280	28	2.7
EPS300F280-5	280	5	50.0
EPS300F280-12	280	12	25.0
EPS300F280-15	280	15	20.0
EPS300F280-24	280	24	12.6
EPS300F280-28	280	28	10.8