



■ Features :

- Compliance to EN50155 and EN45545-2 railway standard
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature / Input reverse polarity
- 4000VDC I/O isolation
- Cooling by free air convection
- Half encapsulated
- Built-in constant current limiting circuit
- 1U low profile 40mm
- All using 105°C long life electrolytic capacitors
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty



SPECIFICATION

MODEL		RSD-300B-5	RSD-300B-12	RSD-300B-24	RSD-300B-48	RSD-300C-5	RSD-300C-12	RSD-300C-24	RSD-300C-48
OUTPUT	DC VOLTAGE	5V	12V	24V	48V	5V	12V	24V	48V
	RATED CURRENT	42A	22.5A	11.3A	5.7A	42A	25A	12.5A	6.3A
	CURRENT RANGE	0 ~ 42A	0 ~ 22.5A	0 ~ 11.3A	0 ~ 5.7A	0 ~ 42A	0 ~ 25A	0 ~ 12.5A	0 ~ 6.3A
	RATED POWER	210W	270W	271.2W	273.6W	210W	300W	300W	302.4W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	180mVp-p	100mVp-p	120mVp-p	150mVp-p	180mVp-p
	VOLTAGE TOLERANCE Note.3	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%
	LINE REGULATION	± 0.5%	± 0.3%	± 0.2%	± 0.5%	± 0.5%	± 0.3%	± 0.2%	± 0.5%
	LOAD REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%
	SETUP, RISE TIME	800ms, 50ms at full load							
HOLD UP TIME (Typ.)	B/C- type comply with S1 level @ full load, comply with S2 level @ 70% load								
INPUT	VOLTAGE RANGE	CONTINUOUS 16.8 ~ 31.2VDC				33.6 ~ 62.4VDC			
		1 SEC. 14.4 ~ 33.6VDC				28.8 ~ 67.2VDC			
	EFFICIENCY (Typ.)	89%	89.5%	90%	91.5%	90.5%	91%	91.5%	92%
	DC CURRENT (Typ.)	9.7A/24V	14.6A/24V	14.6A/24V	14.6A/24V	4.8A/48V	7.2A/48V	7.2A/48V	7.2A/48V
	INRUSH CURRENT (Typ.)	45A/24VDC				45A/48VDC			
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed							
	OVER VOLTAGE	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V	55.2 ~ 64.8V	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V	55.2 ~ 64.8V
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down							
ENVIRONMENT	WORKING TEMP.	-40 ~ +55°C (no derating) ; +70°C @ 60% load by free air convection ; +70°C no derating with external base plate, TX class compliance							
	WORKING HUMIDITY	5 ~ 95% RH non-condensing							
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 5 ~ 95% RH							
	TEMP. COEFFICIENT	± 0.03%/°C (0 ~ 55°C)							
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes ; Mounting : compliance to IEC61373							
SAFETY & EMC (Note 4)	SAFETY STANDARDS	Meet IEC60950-1(LVD)							
	WITHSTAND VOLTAGE	I/P-O/P:4KVDC I/P-FG:2.5KVDC O/P-FG:2.5KVDC							
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH							
	EMC EMISSION	Compliance to EN55022 (CISPR22) Conduction Emission: Class A, Radiation Emission: Class B							
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A							
	RAILWAY STANDARD	Meet EN50155 / IEC60571 including IEC61373 for shock & vibration, EN50121-3-2 for EMC ; EN45545-2 for fire protection							
OTHERS	MTBF	130.7K hrs min. MIL-HDBK-217F (25°C)							
	DIMENSION	216*97*40mm (L*W*H)							
	PACKING	1.19Kg ; 12pcs/15.3Kg/1.12CUFT							
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 24,48VDC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>5. Strongly recommended that external output capacitance should not exceed 5000uF.</li> </ol>								



■ Features :

- Compliance to EN50155 and EN45545-2 railway standard
- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage / Over temperature / Input reverse polarity
- 4000VDC I/O isolation
- Cooling by free air convection
- Half encapsulated
- Built-in constant current limiting circuit
- 1U low profile 40mm
- All using 105°C long life electrolytic capacitors
- LED indicator for power on
- 100% full load burn-in test
- 3 years warranty



SPECIFICATION

MODEL		RSD-300D-5	RSD-300D-12	RSD-300D-24	RSD-300D-48	RSD-300E-5	RSD-300E-12	RSD-300E-24	RSD-300E-48	
OUTPUT	DC VOLTAGE	5V	12V	24V	48V	5V	12V	24V	48V	
	RATED CURRENT	42A	25A	12.5A	6.3A	42A	25A	12.5A	6.3A	
	CURRENT RANGE	0 ~ 42A	0 ~ 25A	0 ~ 12.5A	0 ~ 6.3A	0 ~ 42A	0 ~ 25A	0 ~ 12.5A	0 ~ 6.3A	
	RATED POWER	210W	300W	300W	302.4W	210W	300W	300W	302.4W	
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	150mVp-p	180mVp-p	100mVp-p	120mVp-p	150mVp-p	180mVp-p	
	VOLTAGE TOLERANCE Note.3	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	± 2.0%	
	LINE REGULATION	± 0.5%	± 0.2%	± 0.2%	± 0.5%	± 0.5%	± 0.3%	± 0.2%	± 0.5%	
	LOAD REGULATION	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	± 1.0%	
	SETUP, RISE TIME	800ms, 50ms at full load								
HOLD UP TIME (Typ.)	D-type and E-5 comply with S2 level @ full load; other E- type comply with S1 level @ full load, comply with S2 level @ 70% load									
INPUT	VOLTAGE RANGE	CONTINUOUS	67.2 ~ 143VDC				25.2 ~ 46.8VDC			
		1 SEC.	57.6 ~ 154VDC				21.6 ~ 50.4VDC			
	EFFICIENCY (Typ.)	90%	91.5%	91.5%	91.5%	88%	90%	91%	91%	
	DC CURRENT (Typ.)	2.1A/110V	3.1A/110V	3.1A/110V	3.1A/110V	6.5A/36V	9.2A/36V	9.2A/36V	9.2A/36V	
	INRUSH CURRENT (Typ.)	45A/110VDC					45A/36VDC			
PROTECTION	OVERLOAD	105 ~ 135% rated output power Protection type : Constant current limiting, recovers automatically after fault condition is removed								
	OVER VOLTAGE	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V	55.2 ~ 64.8V	5.75 ~ 7V	13.8 ~ 16.2V	27.6 ~ 32.4V	55.2 ~ 64.8V	
	OVER TEMPERATURE	Shut down o/p voltage, recovers automatically after temperature goes down								
ENVIRONMENT	WORKING TEMP.	-40 ~ +55°C (no derating) ; +70°C @ 60% load by free air convection ; +70°C no derating with external base plate, TX class compliance								
	WORKING HUMIDITY	5 ~ 95% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-40 ~ +85°C, 5 ~ 95% RH								
	TEMP. COEFFICIENT	± 0.03%/°C (0 ~ 55°C)								
	VIBRATION	10 ~ 500Hz, 5G 10min./1cycle, 60min. each along X, Y, Z axes ; Mounting : compliance to IEC61373								
SAFETY & EMC (Note 4)	SAFETY STANDARDS	Meet IEC60950-1(LVD))								
	WITHSTAND VOLTAGE	I/P-O/P:4KVDC I/P-FG:2.5KVDC O/P-FG:2.5KVDC								
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
	EMC EMISSION	Compliance to EN55022 (CISPR22) Conduction Emission: Class A, Radiation Emission: Class B								
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8, light industry level, criteria A								
	RAILWAY STANDARD	Meet EN50155 / IEC60571 including IEC61373 for shock & vibration, EN50121-3-2 for EMC ; EN45545-2 for fire protection								
OTHERS	MTBF	130.7K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	216*97*40mm (L*W*H)								
	PACKING	1.19Kg ; 12pcs/15.3Kg/1.12CUFT								
NOTE	<ol style="list-style-type: none"> <li>1. All parameters NOT specially mentioned are measured at 36,110VDC input, rated load and 25°C of ambient temperature.</li> <li>2. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uF &amp; 47uF parallel capacitor.</li> <li>3. Tolerance : includes set up tolerance, line regulation and load regulation.</li> <li>4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a 360mm*360mm metal plate with 1mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on <a href="http://www.meanwell.com">http://www.meanwell.com</a>)</li> <li>5. Strongly recommended that external output capacitance should not exceed 5000uF.</li> </ol>									