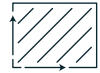


## EDM300 SERIES



300W EXTERNAL

DIMENSIONS:



8.74 x 4.4 x 1.77"  
(222 x 112 x 45mm)



SWITCH OPTION

CONNECTOR  
CUSTOMISATION

CLASS I OR II

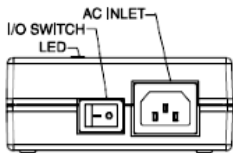
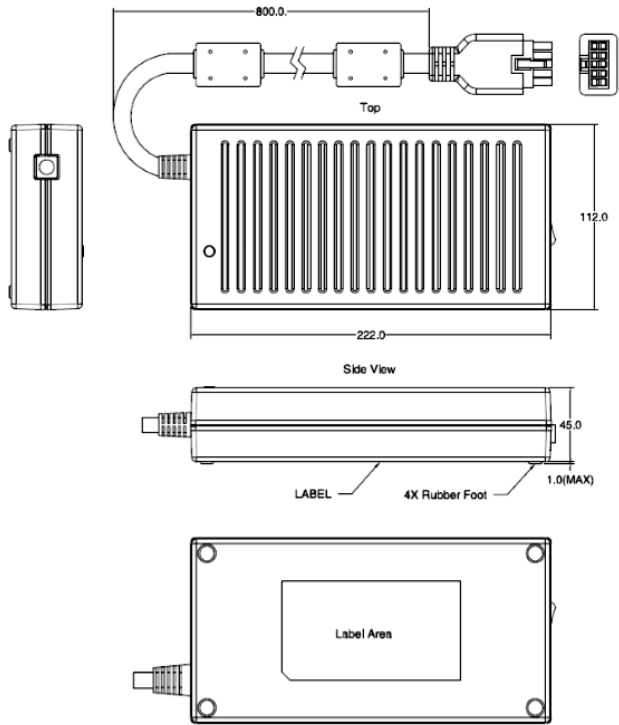
### Part numbers

EDM	300	12	-	S
Series	Power (W)	Output voltage		Options
		12 = 12VDC 15 = 15VDC 19 = 19VDC 24 = 24VDC 28 = 28VDC 48 = 48VDC 54 = 54VDC		-Switch option -C2 Class II

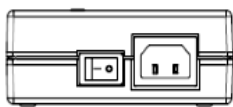
### Key specifications

Input range	Safety certification	Efficiency	Environmental performance
90-260VAC	UL/IEC/EN 60601-1, 60950-1, 62368-1	<92%	Operational: -30 to 60°C

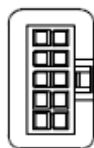
### Mechanical



Front View (IEC320-C14)



Front View (IEC320-C18)



FRONT VIEW  
10P DIN

Pin	Function
1	-DC
2	-DC
3	-DC
4	-DC
5	-DC
6	+DC
7	+DC
8	+DC
9	+DC
10	NC

### Notes

1. All dimensions in mm
2. Tolerance:  $\pm 1$ mm
3. 16 AWG 4ft DC output cable
4. Output connector Molex 10 pin minifit, pitch 4.2mm
5. Class I models: IEC-320-C14. Class II models: IEC-320-C18
6. For UK/ US/ EU mains power cable please ourder UK-C14, US-C14 or EU-C14 separately
7. -DC is a floating output and not bonded to AC earth

### Weight

1570g

## EDM300 SERIES

### Models & Ratings

Model Number <sup>(1)</sup>	Output Power	Output voltage	Output current
EDM30012S	300W	12V	25A
EDM30015S	300W	15V	20A
EDM30019S	300W	19V	15.79A
EDM30024S	300W	24V	12.5A
EDM30028S	300W	28V	10.71A
EDM30048S	300W	48V	6.25A
EDM30054S	300W	54V	5.56A

1. -C2 for Class II version

2. For version without switch, omit S when ordering

3. For UK/ US/ EU mains power cable please order UK-C14, US-C14 or EU-C14 separately

### Input

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Input voltage	90		260	VAC	See derating curve on page 5
Input frequency	47		63	Hz	
Power factor	0.9		0.95		0.9 at 230VAC, 0.95 at 115VAC full load
Input current (rms)	1.5		3	A	3A at 115VAC, 1.5A at 230VAC
Inrush current	<35		<70	A	at 35VAC & 70VAC. 25°C cool start
No load input power		<0.5		W	

### Output

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Output voltage	12		54	VDC	±5% accuracy
Total regulation		±6		%	Line regulation 1%. Load regulation 5%
Minimum load	0			%	No load power <0.5W. No minimum load.
Ripple & noise	240		300	mVp-p	12V - 240mV, 19V to 54V - 300mV All models measured with 47uF and parallel 0.1uF capacitor. 20 MHz bandwidth
Hold up time		>10		mS	At full load 115VAC
Earth leakage current		263		uA	

### Protections

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Overload	105		150	%	Automatic recovery
Short circuit					Automatic recovery
Over voltage protection	104		134	%	Automatic recovery

### Safety

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Safety standards	UL/IEC/EN 60601-1, 60950-1, 62368-1				
Isolation	Input to Output: 5656			VDC	Input to ground 2121 VDC
Power density			4.41	W/In3	

### EMC: Emissions

	Standard	Test level	Criteria	Notes/Conditions
Conducted	EN55011/32	B		
Radiated	EN55011/32	B		
Harmonic current	EN61000-3-2	Class A		
Voltage flicker	EN61000-3-3			

### EMC: Immunity

	Standard	Test level	Criteria	Notes/Conditions
ESD	EN61000-4-2	3	A	Medical: Contact: 8kV, Air: 15kV ITE: Contact: 4kV, Air: 8kV
Radiated	EN61000-4-3		A	Medical: 3-28V/m, 80-2700MHz, 1KHz 80% AM modulation ITE: 3V/m, 80-1000MHz, 1KHz sine wave 80% AM modulation
EFT	EN61000-4-4	3	A	Medical: 2kV 100KHz ITE: 1kV 5KHz
Surges	EN61000-4-5	Installation class 3	A	2KV L/N to GND, 1KV L to N both at 0°, 90°, 180°, 270° ITE: 0.5, 1, 2, 3, 4KV L/N to GND, Medical: 0.5, 1, 2KV L to N
Conducted	EN61000-4-6		A	Medical: 3-6Vrms, 1KHz 80 AM modulation 150KHZ-80MHZ ITE: 3Vrms, 1KHz 80 AM modulation 150KHZ-80MHZ
Dips and interruptions	EN61000-4-11	100% for 0.5 & 1 cycle, 30% for 25/30 cycles, interrupt 250/300 cycles. Perf criteria: B,C,C		

### Environmental

Parameter	Min	Typical	Max	Unit	Notes/Conditions
Operating temperature	-30		60	°C	See derating curve below
Storage temperature	-30		85	°C	
Cooling					Convection cooled
Temperature coefficient			±0.05	%/°C	
Storage humidity			95	% RH	
MTBF		>200		kHrs	As per MIL-HDBK-217F. At 25°C

Temperature Derating Curve

