

## CUS30M & CUS60M Series

www.us.tdk-lambda.com/lp/products/cus-m-series www.emea.tdk-lambda.com/cus30\_60

## Single Output 30 to 60W Medical & ITE Power Supplies















The CUS30M and CUS60M are 2" x 3" footprint AC/DC power supplies with outputs ranging from 5V to 48V. They are certified to IEC60601-1 3rd edition (medical), IEC60950-1 and IEC60335-1 with compliance to EN60601-1-2:2015 Edition 4 immunity requirements. Rated at 30W and 60W, these compact products meet class B conducted and radiated EMI in either a Class I or Class II (double insulated) construction, without the need for external filtering.

Features	Benefits
• 30 to 60W Convection Cooled	Quite Operation
Medical Certification (2 x MoPP)	Suitable for B and BF Rated Equipment
Class B Conducted and Radiated EMI	Easier System Compliance
Suitable for Class I and II Installations	Flexible Utilisation
Compact 2" x 3" Footprint	Space Saving in End Equipment
Enclosure, Mounting and Connection Options	Versatile Application

Model Selector								
Model	Output Voltage (V)	Maximum Current (A)	Maximum Power (A)	Load Reg (mV)	Line Reg (mV)	Ripple Noise (mV) (1)	Efficiency (typ) % (2)	Average Active Efficiency (typ) % (2)
CUS60M-5	5	6	30	100	20	120	81 / 81	81 / 79.5
CUS30M-12	12	2.5	30	120	48	120	87 / 88	87 / 87
CUS60M-12	12	5	60	120	48	120	87 / 88	87 / 86
CUS30M-15	15	2	30	120	60	150	87 / 88	87 / 87
CUS60M-15	15	4	60	120	60	150	87.5 / 87	87 / 86.5
CUS30M-18	18	1.7	30.6	144	72	150	87 / 88	87 / 87
CUS60M-18	18	3.25	60.3	144	72	150	88 / 88	87 / 87
CUS30M-24	24	1.25	30	192	96	150	88 / 90	87 / 87
CUS60M-24	24	2.5	60	192	96	150	89 / 90	88 / 87
CUS30M-36	36	0.84	30.24	288	144	200	88 / 90	88 / 89
CUS30M-48	48	0.63	30.24	384	192	200	88 / 90	88 / 89
CUS60M-48	48	1.25	60	384	192	200	89 / 91	90 / 89

Options	
Suffix	Description
Blank	Open frame, JST connectors
/A	Cover, JST connectors. See website for derating
/CO2	Open frame, JST connectors, pcb coating
/M	Open frame, Molex 5195-03 & -04 mating connectors
/P	Open frame, JST connectors, Pcb mount
/S	Open frame, JST connectors, single fuse, (Line only)



Specifications				
Model		CUS30M	CUS60M	
Input				
Input Voltage range	V	V 85 - 264VAC (3)		
Input Frequency	Hz	47- 63Hz		
Input Current (110/230VAC)	Α	0.6 / 0.4	5V: 0.7 / 0.5, 12-48V: 1.2 / 0.8	
Inrush Current at 230VAC (typ) (Cold Start)	Α	30A at 115VAC, 60A at 230VAC		
Leakage Current	uA	<0.25mA at 265VAC, 60Hz	<0.2mA at 265VAC, 60Hz	
Touch Current	uA	100µA at 265VAC, 60Hz	60µA at 265VAC, 60Hz	
Harmonic Compliance	-	Meets EN61000-3-2		
No Load Power Consumption	W	<0.3W at 265VAC <0.5W at 265VAC		
Hold Up Time (typ) at 115VAC Input	ms	20 / 100		
Efficiency	-	See model selector		
Average Efficiency	-	See model selector. Measured at 25%, 50%, 75% and 100% load conditions		
Conducted & Radiated EMI	-	EN55011-B, EN55032-B, FCC Class B		
Immunity	-	IEC61000-4-2, IEC60601-1-2 Ed4. See immunity table		
Insulation Class	-	Construction suitable for Class I or Class II installation		
Safety Agency Certifications	-	EN/IEC/UL/ES/CSA60601-1, EN/IEC/UL/CSA60950-1, IEC60335-1, CE Mark		

Immunity					
Test	Standard	Test Level	Criteria	Notes	
ESD	EN61000-4-2	3 & 4	A	Level 4 contact discharge only	
Radiated Susceptibility	EN61000-4-3	3	Α	-	
Electrical Fast Transient Burst	EN61000-4-4	3	Α	-	
Surge	EN61000-4-5	3 & 4	Α	Level 4 common mode only	
Conducted Susceptibility	EN61000-4-6	3	Α	-	
Magnetic fields	EN61000-4-8	4	Α		
Voltage Dips	EN61000-4-11	Class 3	В	100 - 120VAC	
			A	200 - 240VAC	
Short Interruptions	EN61000-4-11	Class 3	В	-	
Voltage Dips	EN60601-1-2:2015	Class 2	В	100 - 120VAC	
			A	200 - 240VAC	
Short Interruptions	EN60601-1-2:2015	Class 2	В	-	
SEMI F47 Line Dip	SEMI F47	-	-	At input voltages > 200VAC	