

	Topology	Schematic	Power (Watts)	Typical Efficiency	Relative Cost	Magnetics Required	DC Transfer Function (V _{OUT} /V _{IN})	Maximum Practical Duty Cycle	Universal Input (90-264) V _{AC}	Multiple Outputs	V _{out} <v<sub>IN Range</v<sub>	V _{out} >V _{IN} Range
Non-Isolated Topologies	Buck	Switch D C Vout	500	85	1	Single Inductor	D	0.9	No	No	Yes	No
	Boost	Vin Switch C Vout	150	70	1	Single Inductor	1 1 – D	0.9	No	No	No	Yes
	Buck- Boost	Vin L C Vout	150	70	1	Single Inductor	- <i>D</i> 1 - <i>D</i>	0.9	No	No	Yes	Yes
	SEPIC	Vin Switch Suitch C Vout	150	75	1.2	Coupled or Two Inductors	<u>D</u> 1 – D	0.9	No	No	Yes	Yes
	Ćuk	Vin Switch D C Vout	150	75	1.2	Coupled or Two Inductors	- <i>D</i> 1 - <i>D</i>	0.9	No	No	Yes	Yes
Isolated Topologies	DCM Flyback	Vin D C Vout	150	75	1.5	Transformer	$Dx\sqrt{\frac{TxV_{out}}{2xl_{out}xLP}}$	0.9	Yes	Yes	Yes	Yes
	Forward	Vin Switch C Vout	150	75	1.8	Transformer and Inductor	$\frac{2N_s}{N_p} \times D$	0.45	Yes	Yes	Yes	Yes
	Push- Pull	Switch D C Vout	500	80	1.8	Transformer and Inductor	$\frac{N_s}{N_p} \times D$	0.45	No	Yes	Yes	Yes
	Half- Bridge	Vin Swelick) D D D D D D D D D D D D D D D D D D D	500	85	2	Transformer and Inductor	$\frac{N_s}{N_p} \times D$	0.45	Yes	Yes	Yes	Yes
	Resonant LLC	Switch Cr Lr D C Yout	500	90	2	Transformer	Frequency Dependent Based on Resonant Tank Transfer Function	0.45	Yes	Yes	Yes	Yes