

## 96 - 204W Quarter Brick Converter

### Features

- ◆ Standard Quarter Brick Footprint
- ◆ 18-36, 36-75VDC Inputs
- ◆ 3.3V 40A - 15V 10A Nominal Outputs
- ◆ Through Hole Mounting
- ◆ Low 10.41mm Profile
- ◆ 1500VDC Basic Isolation
- ◆ High operating efficiency (>90%)
- ◆ Constant switching frequency
- ◆ Low component count



### Key Market Segments & Applications



Specifications					
Model					
Nominal Output Voltage	VDC	3.3	5	12	15
Input Voltage Range	VDC	See Model Selector			
Input Current (max)	A	10			
Efficiency	-	Typically 90% at full load			
Output Voltage Tolerance	VDC	3.2 - 3.4	4.85 - 5.15	11.58 - 12.42	14.48 - 15.52
Ripple & Noise (max)(pk to pk) (1)	mV	150	150	150	150
Line Regulation (max)	mV	10	15	30	30
Load Regulation (max)	mV	10	30	30	30
Overload Protection (typ)	%	Inception- 133-158% of rated output; Short circuit - auto recovery			
Overvoltage Protection	VDC	3.8 - 4.6	5.7 - 6.7	13.6 - 16.5	16.7 - 21
Remote Sense	-	Yes			
Remote On / Off	-	Positive or Negative Logic available, see Model Selector			
Temperature (operating)	°C	-40 to 125			
Temperature (storage)	°C	-55 to 125			
Humidity (operating)	-	20-95% RH Non condensing			
Humidity (storage)	-	10-95% RH Non condensing			
Cooling	-	Convection or forced air			
Isolation Voltage	VDC	1500			
Vibration (non operating)	-	5 to 50Hz @ 0.5g (4.9m/s <sup>2</sup> ), and 50 to 500Hz @ 1.5g (14.7m/s <sup>2</sup> ) per Bellcore TR-EOP-000063-5.4.4			
Shock	-	196.1m/s <sup>2</sup>			
Safety Agency Approvals	-	UL60950 (US and Canada), VDE0805 (IEC60950), CB scheme (IEC60950)			
Weight (max)	g	50			
Size	mm	57.9 x 36.8 x 10.41			
Warranty	-	3 Years			

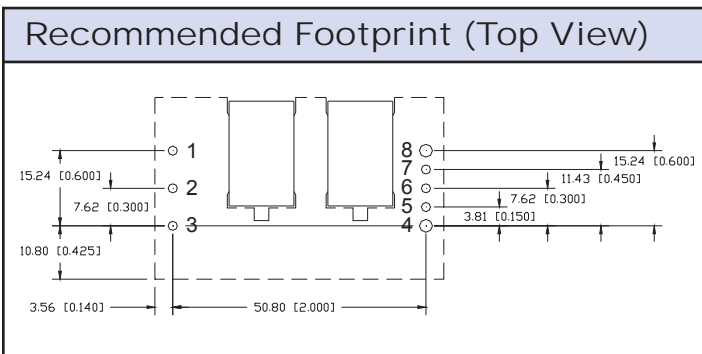
Notes: See website for detailed specifications

- (1) Measured across one 22µF and one 0.1µF ceramic capacitor;  
BW = 20MHz

Model Selector							
Model	Input Voltage (V)	Output Voltage (V)	Adjust Range (V)	Max. Curr. (A)	Max. Output Power (W)	On/Off Polarity	Pin Length
iQE24015A033V-031-R	16 - 40	3.3	2.97 - 3.63	15	49.5	Neg	0.145
iQE24030A033V-001-R	18 - 36	3.3	2.97 - 3.63	30	99	Neg	0.145
iQE24030A033V-007-R	18 - 36	3.3	2.97 - 3.63	30	99	Neg	0.180
iQE24024A050V-001-R	18 - 36	5	4.5 - 5.5	24	120	Neg	0.145
iQE24024A050V-007-R	18 - 36	5	4.5 - 5.5	24	120	Neg	0.180
iQE48030A050V-000-R	36 - 75	5	4.5 - 5.5	30	150	Pos	0.145
iQE48030A050V-001-R	36 - 75	5	4.5 - 5.5	30	150	Neg	0.145
iQE24009A120V-001-R	18 - 36	12	10.8 - 13.2	9	108	Neg	0.145
iQE4W011A120V-001-R	18 - 60	12	10.8 - 13.2	11	132	Neg	0.145
iQE48017A120V-000-R	36 - 75	12	10.8 - 13.2	17	204	Pos	0.145
iQE48017A120V-001-R	36 - 75	12	10.8 - 13.2	17	204	Neg	0.145
iQE48017A120V-007-R	36 - 75	12	10.8 - 13.2	17	204	Neg	0.180
iQE24007A150V-001-R	18 - 36	15	13.5 - 16.5	7	105	Neg	0.145
iQE48010A150V-001-R	36 - 75	15	13.5 - 16.5	10	150	Neg	0.145
iQE48010A150V-007-R	36 - 75	15	13.5 - 16.5	10	150	Neg	0.180

**Preferred Model**

Other models available for volume opportunities. Contact factory.



**Pinout**

PIN	Function
1	Vin (+)
2	On / Off
3	Vin (-)
4	Vout (-)
5	Sense (-)
6	Trim
7	Sense (+)
8	Vout (+)

For Additional Information, please visit [us.tdk-lambda.com/lp/products/iqe-series.htm](http://us.tdk-lambda.com/lp/products/iqe-series.htm)

