

## Dualeta™ iQA48024A Series DC/DC Power Modules

48V Input, 24A Output  
Dual Output Quarter Brick



The Dualeta™ Family is a **72W** family of highly versatile, **independently regulated, dual output quarter brick** power modules with output voltage tracking. Its output current loading scheme is fully flexible: **0 to 15A** can be drawn from either output with no minimum load requirements, with total load currents up to **24A**. An **ultra wide range independent output trim** allows the realization of dual output voltage combinations between 1.0 and 3.3V. The superior versatility of the Dualeta™ family substantially reduces the quantity of distinct part numbers in the end user part portfolio, lowering cost of ownership.

### Features

- **Standard Dual Quarter Brick format**
- **Output voltage combinations between 1.0V and 3.3V**
- **Two output trim options:**
  - **Standard Dual Trim** – wide range independent adjustment of either output, using two trim pins
  - **Optional Single Tracking Trim** – adjust both outputs together by 10% according to industry standard resistor tables
- **Independently regulated, tight tolerance outputs**
- **Flexible loading: 0-15A from either output, 24A total load**
- **High efficiency – up to 86%**
- **High output power: 72W**
- **Basic insulation – 1500 Vdc**
- Full, auto-recovery protection:
  - Input under and over voltage
  - Output over voltage
  - Current limit
  - Short circuit
  - Thermal limit

- Monotonic, tracking start-up
- High reliability open frame, surface mount construction
- Baseplate for improved thermal management
- Safety markings pending
- Multiple patents pending

### Options

- Optional Single Tracking Trim – using industry standard resistor tables
- Remote on/off (negative logic)
- Short Thru-hole pins 2.79 mm (0.110")

## Advance Data Sheet: Dualeta™ iQA Series – Dual Quarter Brick

### Ordering information

Product Identifier	Package Size	Platform	Input Voltage	Output Current/Power	Output Units	Main Output Voltage	# of Outputs		Vo2 option (Safety Class)	Feature Set
i	Q	A	48	024	A	033	M	-	0	00
Innoveta Technologies™	Quarter Brick	Dualeta™	36-75V	24	Amps	033 – 3.3V	Multiple		0 – std.	
						025 – 2.5V			1 – option 1	
									2 – option 2	

Feature Set	On/Off Logic	Pin Length	Trim
00	Positive	0.145"	Dual independent pins
01	Negative	0.145"	Dual independent pins
02	Positive	0.145"	Single tracking pin
03	Negative	0.145"	Single tracking pin
04	Positive	0.110"	Dual independent pins
05	Negative	0.110"	Dual independent pins
06	Positive	0.110"	Single tracking pin
07	Negative	0.110"	Single tracking pin

### Standard Product Offering

Code	Input Voltage	Output Voltage	Total Output Current	Maximum Output Power	Efficiency
iQA48024A033M-001	36V to 75V	3.3/2.5V	24A	72W	85%
iQA48024A033M-103	36V to 75V	3.3/1.8V	24A	67.5W	85%
iQA48024A025M-003	36V to 75V	2.5/1.8V	24A	53.7W	83%



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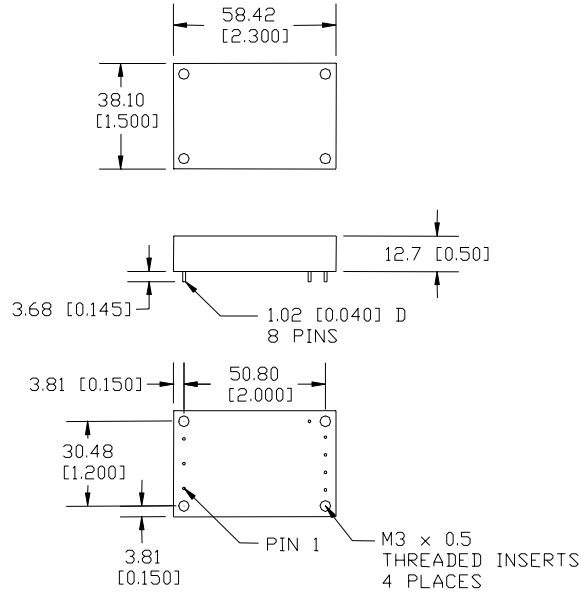
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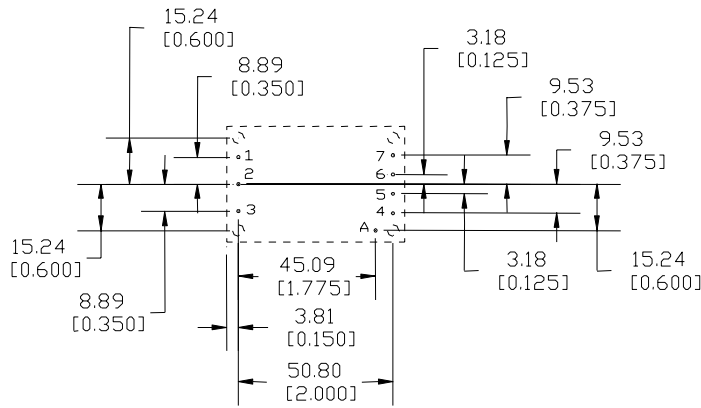
[support@innoveta.com](mailto:support@innoveta.com)  
<http://www.innoveta.com/>

**Mechanical Specification**

Dimensions are in mm [in]. Unless otherwise specified tolerances are: x.x ± 0.5 [0.02], x.xx and x.xxx ± 0.25 [0.010].



**Recommended Hole Pattern:** (top view)



**Pin Assignment:**

PIN	FUNCTION	PIN	FUNCTION
1	Vin (+)	5	Output RTN
2	On/Off (-)	6	Vo1 Trim (Optional: Single tracking trim pin)
3	Vin (-)	7	Vo1 (+)
4	Vo2 (+)	A	Vo2 Trim (Optional: Omit for single trim pin option)