

**FEATURES:**

- RoHS compliant
- Wide 4:1 input range
- Low ripple and noise
- Remote On/Off control
- Power modules for PCB mounting
- Regulated output
- Operating temperature range: -40 to +85°C
- OVP, OLP and SCP

Models

Single output



Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise Typ (mVp-p)	Max Capacitive load (μF)	Isolation (VDC)	Efficiency (%)
AM15EW-2403SIZ	9-36	3.3	4	80	2000	1500	77
AM15EW-2405SIZ	9-36	5	3	80	3300	1500	80
AM15EW-2412SIZ	9-36	12	1.25	120	680	1500	85
AM15EW-2415SIZ	9-36	15	1	150	470	1500	84
AM15EW-4803SIZ	18-75	3.3	4	80	2000	1500	77
AM15EW-4805SIZ	18-75	5	3	80	3300	1500	80
AM15EW-4812SIZ	18-75	12	1.25	120	620	1500	85
AM15EW-4815SIZ	18-75	15	1	150	470	1500	84
AM15EW-11005SIZ	36-160	5	3	80	4700	1500	80
AM15EW-11012SIZ	36-160	12	1.25	120	680	1500	82
AM15EW-11015SIZ	36-160	15	1	150	470	1500	80
AM15EW-11024SIZ	36-160	24	0.625	240	220	1500	80
AM15EW-2403SH30IZ	9-36	3.3	4	80	8100	3000	74
AM15EW-2405SH30IZ	9-36	5	3	80	4700	3000	78
AM15EW-2412SH30IZ	9-36	12	1.25	120	680	3000	80
AM15EW-2415SH30IZ	9-36	15	1	150	470	3000	83
AM15EW-4803SH30IZ	18-75	3.3	4	80	8100	3000	76
AM15EW-4805SH30IZ	18-75	5	3	80	4700	3000	75
AM15EW-4812SH30IZ	18-75	12	1.25	120	680	3000	79
AM15EW-4815SH30IZ	18-75	15	1	150	470	3000	83

Models

Dual output

Model	Input Voltage (V)	Output Voltage (V)	Output Current max (A)	Ripple & Noise Typ (mVp-p)	Max Capacitive load (μF)	Isolation (VDC)	Efficiency (%)
AM15EW-2405DIZ	9-36	±5	±1.5	80	±330	1500	80
AM15EW-2412DIZ	9-36	±12	±0.625	120	±220	1500	85
AM15EW-2415DIZ	9-36	±15	±0.5	150	±200	1500	84
AM15EW-4805DIZ	18-72	±5	±1.5	80	±330	1500	80
AM15EW-4812DIZ	18-72	±12	±0.625	120	±220	1500	85
AM15EW-4815DIZ	18-72	±15	±0.5	150	±200	1500	84
AM15EW-11005DIZ	36-160	±5	±1.5	80	±2300	1500	78
AM15EW-11012DIZ	36-160	±12	±0.62	120	±340	1500	80
AM15EW-11015DIZ	36-160	±15	±0.5	150	±230	1500	81
AM15EW-2405DH30IZ	9-36	±5	±1.5	80	±2300	3000	79
AM15EW-2412DH30IZ	9-36	±12	±0.62	120	±340	3000	83
AM15EW-2415DH30IZ	9-36	±15	±0.5	150	±230	3000	83
AM15EW-4805DH30IZ	18-72	±5	±1.5	80	±2300	3000	78
AM15EW-4812DH30IZ	18-72	±12	±0.62	120	±340	3000	80
AM15EW-4815DH30IZ	18-72	±15	±0.5	150	±230	3000	82

NOTE: All specifications in this datasheet are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified.

Input Specifications

Parameters	Nominal	Typical	Maximum	Units
Voltage range	24 48 110	9-36 18-75 36-160		VDC
Filter	π (Pi) Network			
Absolute Maximum Rating	24 Vin 48 Vin 110 Vin		50 100 220	VDC
Permissible absolute maximum duration			100	ms
Input Voltage variation	dv/dt		5	VDC
Remote On/Off control	ON – TTL high or open circuit; OFF – TTL low or short circuit			

Isolation Specifications

Parameters	Conditions	Typical	Rated	Units
Tested I/O voltage	60 sec		1500 & 3000	VDC
Resistance		> 1000		MOhm
Capacitance		1800		pF

Output Specifications

Parameters	Conditions	Typical	Maximum	Units
Voltage accuracy		± 2		%
Short Circuit protection	Continuous			
Short Circuit restart	Auto recovery			
Over voltage protection	Zener diode clamp protection			
Over load protection	Auto recovery	Over 110% full load		
Line voltage regulation (Single)	HL-LL	± 0.5		%
Line voltage regulation (Dual)	HL-LL	± 0.5		%
Load voltage regulation (Single)	0-100%	± 0.5		%
Load voltage regulation (Dual)	0-100%	± 2		%
Temperature coefficient		± 0.05		%/°C
Recommended Input Fuse (slow blow)	24 Vin	4A/250V		
	48 Vin	2A/250V		
	110 Vin	1A/250V		

General Specifications

Parameters	Conditions	Typical	Maximum	Units
Switching frequency	100% load	200		KHz
Operating temperature	With derating above +50	-40 to +85		°C
Storage temperature		-55 to +115		°C
Max Case temperature			95	°C
Cooling	Free air convection			
Humidity			95	%
Case material	Nickel coated copper with non-conductive base			
Weight		33		g
Dimensions(L x W x H)	Tolerance ± 0.5 mm	2.00 x 1.00 x 0.40 inches	50.80 x 25.40 x 10.50 mm	
MTBF	> 800 000 hrs (MIL-HDBK -217F, Ground Benign, t=+25°C)			
Soldering Temperature	For max 10 sec		260	°C

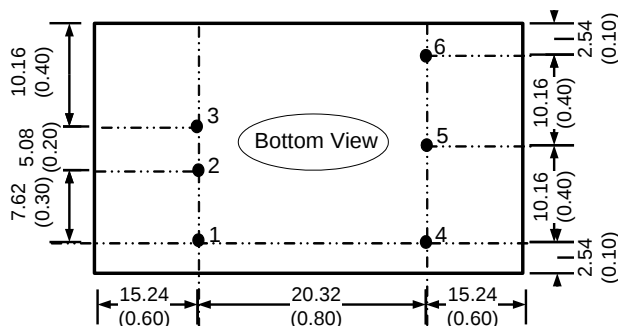
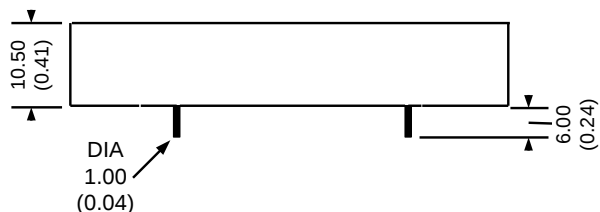
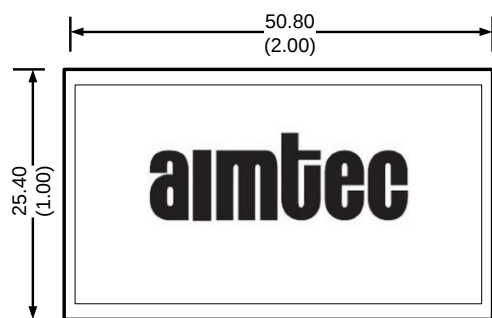
Safety Specifications

Parameters	
Agency Approvals	CE
Standards	EN 55022 class B, EN 55024
	IEC61000-3-2
	IEC61000-3-3
	IEC61000-4-2, Perf. Criteria B
	IEC61000-4-3 Perf. Criteria A
	IEC61000-4-4, Perf. Criteria B
	IEC61000-4-6, Perf. Criteria A
	IEC61000-4-8, Perf. Criteria A
	NOTE: also designed to meet standard IEC 60950-1:2001

Pin Out Specifications

Pin	Single	Dual
1	On/Off Control	On/Off Control
2	-V Input	-V Input
3	+V Input	+V Input
4	-V Output	-V Output
5	No pin	Common
6	+V Output	+V Output

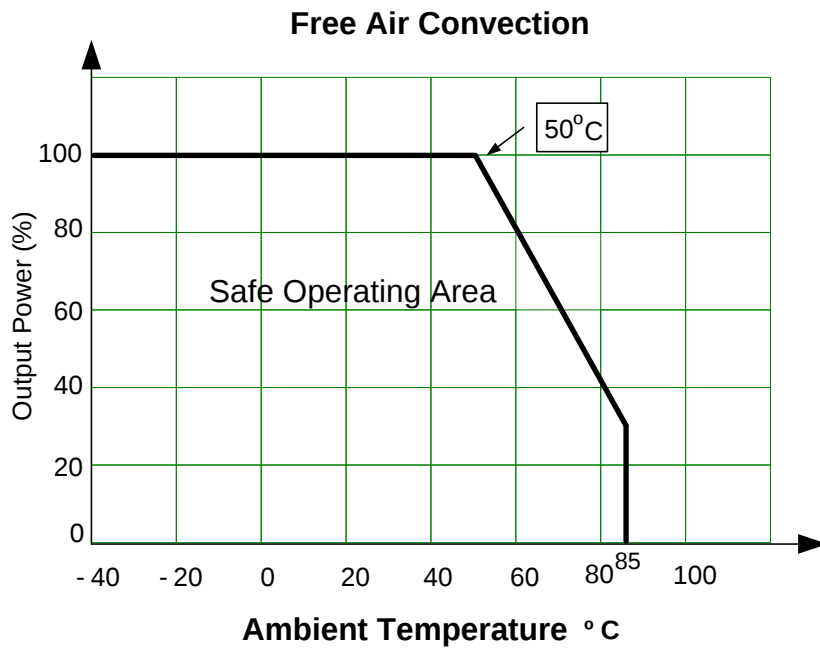
Dimensions



Notes:

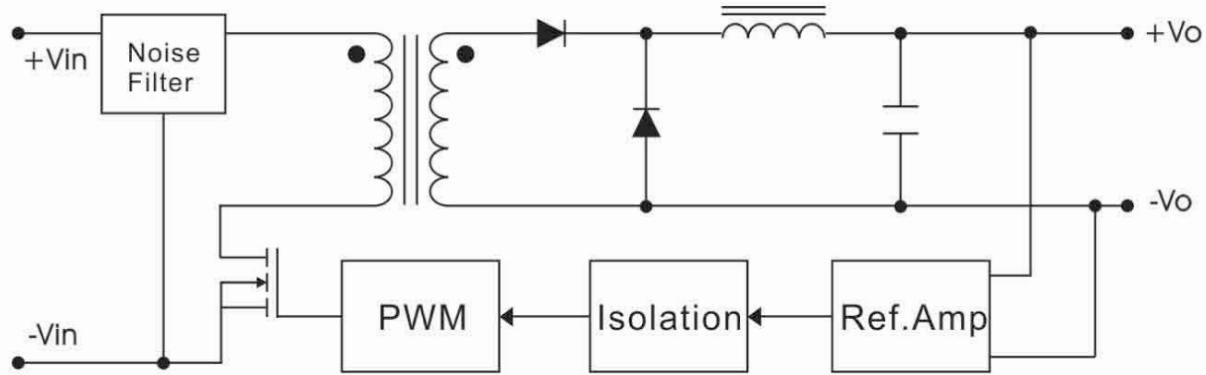
All dimensions are typical
in millimeters (inches).
Tolerance ± 0.25 (± 0.01)

Derating

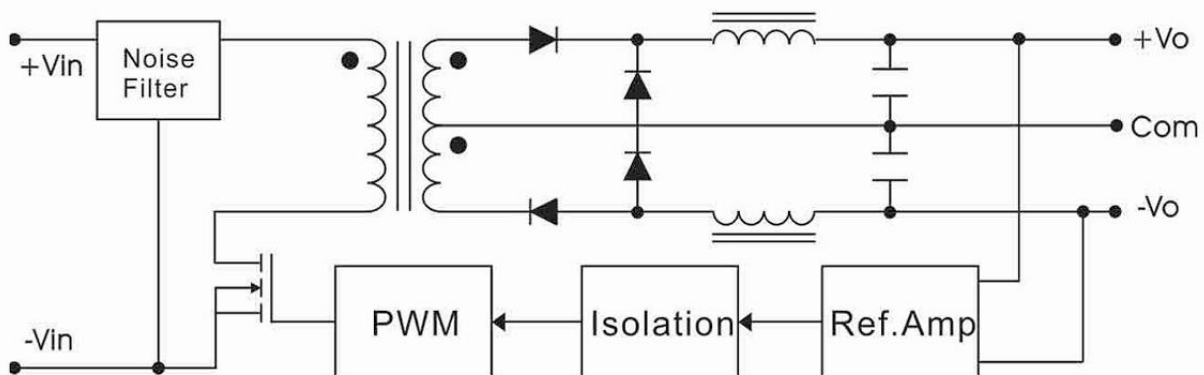


Block diagram

Single Output



Dual Output



NOTE: 1. Datasheets are updated as needed and as such, specifications are subject to change without notice. Once printed or downloaded, datasheets are no longer controlled by Aimtec; refer to www.aimtec.com for the most current product specifications. 2. Product labels shown, including safety agency certifications on labels, may vary based on the date manufactured. 3. Mechanical drawings and specifications are for reference only. 4. All specifications are measured at an ambient temperature of 25°C, humidity<75%, nominal input voltage and at rated output load unless otherwise specified. 5. Aimtec may not have conducted destructive testing or chemical analysis on all internal components and chemicals at the time of publishing this document. CAS numbers and other limited information are considered proprietary and may not be available for release. 6. This product is not designed for use in critical life support systems, equipment used in hazardous environments, nuclear control systems or other such applications which necessitate specific safety and regulatory standards other than the ones listed in this datasheet. 7. Warranty is in accordance with Aimtec's standard Terms of Sale available at www.aimtec.com.