

# 25 Watts

## AA25N

**Total Power:** 25 Watts  
**Input Voltages:** 24V or 48V  
**No. of Outputs:** Single, Dual, Triple



### Special Features

- Ideal for telecom/networking applications
- High efficiency
- Unencapsulated 2.0" x 2.0" x 0.50" package.
- Integral heat spreader available
- 100°C Baseplate temperature
- Enable (on/off)
- Thermal protection
- 350kHz Switching frequency
- Under voltage lockout

### Environmental

Operation case temperature range: -40°C to +100°C

Storage temperature: -40°C to +125°C

Humidity: 5% to 100%

### Safety

**UL** UL1950  
**CAN** CAN22.2-950  
**TUV** EN60950

### Electrical Specs

#### Input

Input range	18-36 Vdc (24 Vdc nominal) 36 - 75Vdc (48Vdc nominal)
Input capacitance	2mF typical
Input reverse voltage protection	Fuse recommended
Input surge voltage	100V for 100mS (048L) 50V for 100mS (024L) 36V for 100mS (012L)
Input reflected ripple	<10mA (P-P) See Note 2
Undervoltage lockout	Vin<32V (-048L ONLY)
Efficiency	82% typical

#### Output

Voltage tolerance	Main Output $\pm 1.0\%$ Aux Output $\pm 3.0\%$ Dual Output $\pm 2.0\%$
Line regulation	Main Output $\pm 0.1\%$ Aux Output $\pm 0.5\%$ Dual Output $\pm 0.2\%$
Load regulation	Main Output $\pm 0.75\%$ Aux Output $\pm 3.0\%$ Dual Output $\pm 0.5\%$ (10% to 100% load) Note 6.
Noise/ripple	50mV P-P, Singles 100mVp-p, Dual , Triple
Short circuit protection	Continuous power cycle
Overvoltage protection	120% of V0, Typ
Transient response	2% Vo typ; recovery <500msec typ (25% step load change to within 1%Vo)
Temperature coefficient	$\pm 0.2\%/^{\circ}\text{C}$
Switching frequency	350kHz

#### Control

Enable	on = 2.5 to 5.5Vdc or open circuit off = 0 to 0.8Vdc Ref. to -Vin. TTL compatible
Input current (enable OFF)	<10ma
Output trim	Single output models
Thermal shutdown	110°C Baseplate temperature (typ) Auto reset

#### Isolation

I/O isolation	1500Vdc
Isolation resistance	15 x 108 ohms

## AMERICAS

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## EUROPE

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## ASIA

Units 2111-2116, Level 21  
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Hong Kong  
Telephone: 852-2437-9662  
Facsimile: 852-2402-4426



## Ordering Information

Input VDC	Output 1 Voltage	Output 2 Voltage	Output 3 Voltage	Output Power	Model Number
18-36	12V @ 2.08A			25W	AA25N-024L-120S
18-36	15V @ 0.83A	-15V @ 0.83A		25W	AA25N-024L-150D
36-75	3.3V @ 6A			19.8W	AA25N-048L-033S
36-75	5V @ 5A			25W	AA25N-048L-050S
36-75	5V @ 5A	3.3V @ 6A		25W	AA25N-048L-050D033
36-75	5V @ 2.5A	12V @ 0.52A	-12V @ 0.52A	25W	AA25N-048L-050T120

## Notes:

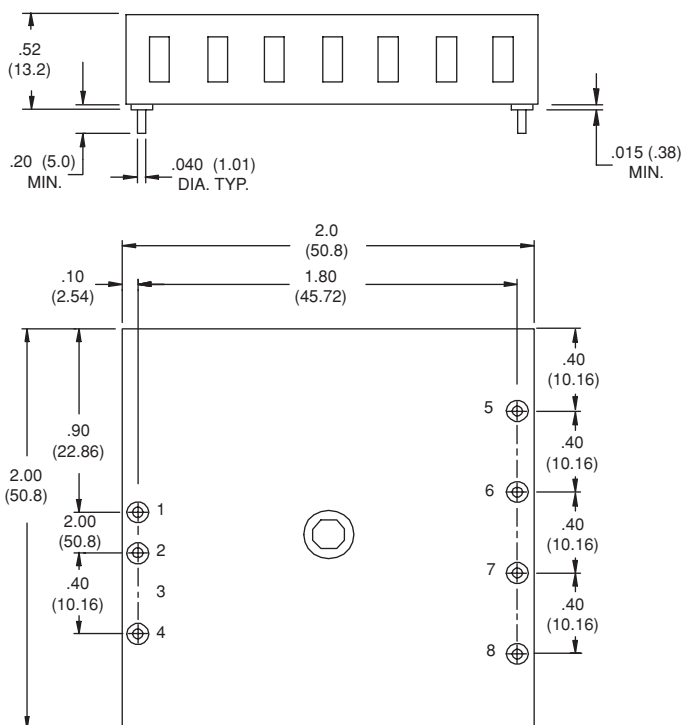
Max output power not to exceed 25W total. The sum of output currents not to exceed 6 Amps.  
Any output loading ratio within the maximum specified limits is possible.

## Pin Assignments

Single Output	Dual Output	Triple Output
1. +Vin	1. +Vin	1. +Vin
2. -Vin	2. -Vin	2. -Vin
3. No Pin	3. No Pin	3. No Pin
4. Enable	4. Enable	4. Enable
5. No Pin	5. V1 Out	5. V2 Out
6. V1 Out	6. Comm	6. V1 Out
7. Comm	7. V2 Out	7. Comm
8. Trim	8. N/C	8. V3 Out

## Notes:

- 20 MHz bandwidth. An external 2.2mf ceramic capacitor is recommended to be placed from +V out to -V out.
- 12V and 24V Input models require external capacitor connected between +V in and -V in to meet FCC class A and ETS300-386-1 requirements for conducted noise. Consult Factory for filtering information to meet FCC class B, VDE or EIC specifications.
- All specifications are typical at nominal line, full load, and 25° C unless otherwise noted.
- All specifications subject to change without notice. Mechanical drawings are for reference only.
- Please refer to the Technical Reference Notes for more information.
- Balanced loads on dual and Aux output voltage.
- Warranty: 1 yr



Case material: Metal base/cover  
Weight: 2.5 Oz / 68Gr.

AA25N

Astec Conventional Power