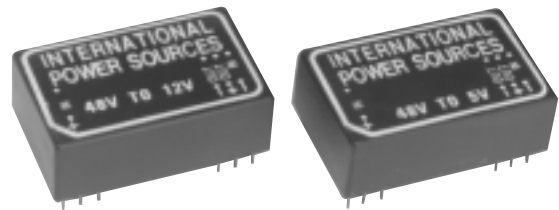


## International Power Sources, Inc.

260 Hopping Brook Road  
 Holliston, Massachusetts 01746  
 Tel. (508) 429-4440 Fax (800) 226-2100  
<http://www.intlpower.com>

## DC/DC Converters



### WA Series: 3 Watt Wide Input Range

### FEATURES

- 2:1 Input Range
- Isolated Outputs
- Efficiency to 74%
- Optional 4:1 Input Range
- Input  $\pi$  Filter
- Fully Regulated Outputs
- Industry Standard Pinouts
- Optional 3K VDC Isolation

### MODELS CHART

MODEL	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF
				NO LOAD	FULL LOAD	
WA101	4.5-6.0VDC	5VDC	500mA	75mA	730mA	69
WA102	4.5-6.0VDC	12VDC	250mA	75mA	874mA	69
WA103	4.5-6.0VDC	15VDC	200mA	75mA	869mA	69
WA104	4.5-6.0VDC	$\pm 5$ VDC	$\pm 250$ mA	75mA	715mA	70
WA105	4.5-6.0VDC	$\pm 12$ VDC	$\pm 125$ mA	75mA	855mA	70
WA106	4.5-6.0VDC	$\pm 15$ VDC	$\pm 100$ mA	75mA	855mA	70
WA201	9-18VDC	5VDC	500mA	25mA	310mA	67
WA202	9-18VDC	12VDC	250mA	25mA	345mA	73
WA203	9-18VDC	15VDC	200mA	25mA	357mA	70
WA204	9-18VDC	$\pm 5$ VDC	$\pm 250$ mA	25mA	320mA	65
WA205	9-18VDC	$\pm 12$ VDC	$\pm 125$ mA	25mA	370mA	68
WA206	9-18VDC	$\pm 15$ VDC	$\pm 100$ mA	25mA	370mA	68
WA301	18-36VDC	5VDC	500mA	15mA	150mA	70
WA302	18-36VDC	12VDC	250mA	15mA	170mA	74
WA303	18-36VDC	15VDC	200mA	15mA	174mA	72
WA304	18-36VDC	$\pm 5$ VDC	$\pm 250$ mA	15mA	170mA	61
WA305	18-36VDC	$\pm 12$ VDC	$\pm 125$ mA	15mA	186mA	67
WA306	18-36VDC	$\pm 15$ VDC	$\pm 100$ mA	15mA	182mA	69
WA401	36-72VDC	5VDC	500mA	15mA	73mA	71
WA402	36-72VDC	12VDC	250mA	15mA	94mA	66
WA403	36-72VDC	15VDC	200mA	15mA	92mA	68
WA404	36-72VDC	$\pm 5$ VDC	$\pm 250$ mA	15mA	85mA	61
WA405	36-72VDC	$\pm 12$ VDC	$\pm 125$ mA	15mA	94mA	67
WA406	36-72VDC	$\pm 15$ VDC	$\pm 100$ mA	15mA	94mA	67

**NOTE:** NOMINAL INPUT VOLTAGE 5, 12, 24, OR 48 VDC

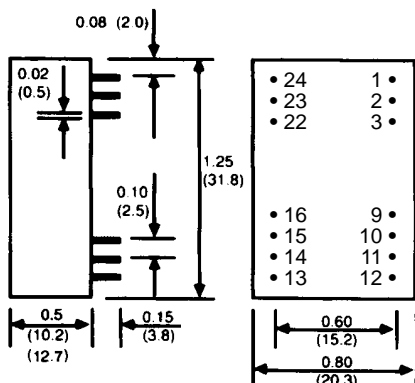
FOR OPTIONAL 4:1 INPUT RANGE:  
 9-36VDC: ADD SUFFIX "A" TO WA200 SERIES  
 20-72VDC: ADD SUFFIX "A" TO WA300 SERIES

# Electrical Specifications

All specifications typical at nominal line, full load and 25°C

OUTPUT SPECIFICATIONS	
Voltage Accuracy	±3% max.
Line Regulation (Full Input Range)	±1% max.
Load Regulation (1/4-Full Load)	±2% max.
Ripple and Noise (DC-20MHz)	100 mV p-p max.
Temperature Coefficient	±0.05%/°C max.
Short Circuit Protection	Indefinite
INPUT SPECIFICATIONS	
Input Voltage Range	See Table
Input Filter	π Network
GENERAL SPECIFICATIONS	
Switching Frequency	25 kHz
Efficiency	See Table
Isolation (Input-Output)	500VDC/3000VDC* (1000 Mohm/80pF)
ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature	-25°C to +71°C
Storage Temperature	-55°C to +105°C

# Dimensions and Connections



(BOTTOM VIEW)

PIN	SINGLE OUTPUT	DUAL OUTPUT
1	+ V Input	+ V Input
2	No Connection	- V Output
3	No Connection	Common
10	- V Output	Common
11	+ V Output	+ V Output
12	- V Input	- V Input
13	- V Input	- V Input
14	+ V Output	+ V Output
15	- V Output	Common
22	No Connection	Common
23	No Connection	- V Output
24	+ V Input	+ V Input

PIN	SINGLE OUTPUT	DUAL OUTPUT
1	No Pin	No Pin
2	- V Input	- V Input
3	- V Input	- V Input
9	No Connection	Common
10	No Connection	No Connection
11	No Connection	- V Output
12	No Pin	No Pin
13	No Pin	No Pin
14	+ V Output	+ V Output
15	No Connection	No Connection
16	- V Output	Common
22	+ V Input	+ V Input
23	+ V Input	+ V Input
24	No Pin	No Pin

ALTERNATE PIN OUT  
3000VDC ISOLATION  
Suffix "X"

Dimensions in inches (mm)  
Specifications subject to change.  
\* 3000VDC on "X" Package