

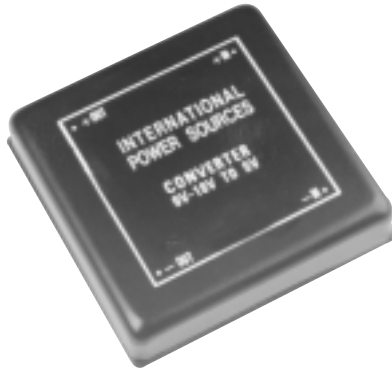
# DC/DC Converters

**XPiQ inc.**

Intelligent Design Quality Product



**10/15 Watts  
WU Series**



- 4:1 Input Range
- 
- Isolated Outputs
- 
- Efficiency to 84%
- 
- Overvoltage Protection
- 
- Input  $\pi$  Filter
- 
- Short Circuit Protected
- 
- Fully Regulated Outputs

## Specification

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

### Input

- Input Voltage Range • See Table
- Input Filter •  $\pi$  Network

### Output

- Voltage Accuracy •  $\pm 1.0\%$  max.
- Line Regulation (Full Input Range) •  $\pm 1.0\%$  max.
- Load Regulation (1/4-full load) •  $\pm 1.0\%$  max.
- Ripple & Noise (DC-20 MHz) • 1% of  $V_{out}$  max.
- Temperature Coefficient •  $\pm 0.02\%/^{\circ}\text{C}$  max.
- Short Circuit Protection • Indefinite

### General

- Switching Frequency • 100 kHz
- Efficiency • See Table
- Isolation (Input-Output) • 500 VDC (1000 Mohm/80pF)

### Environmental

- Operating Temperature •  $-25^{\circ}\text{C}$  to  $+71^{\circ}\text{C}$
- Storage Temperature •  $-55^{\circ}\text{C}$  to  $125^{\circ}\text{C}$



# OUTPUT VOLTAGE & CURRENT RATINGS

WU

Model	Input Voltage	Output Voltage	Output Current	Input Current		% Efficiency
				No Load	Full Load	
WU100	4.5-6.0 VDC	3.3 VDC	3000 mA	10 mA	2470 mA	80
WU101	4.5-6.0 VDC	5.0 VDC	2000 mA	10 mA	2620 mA	76
WU102	4.5-6.0 VDC	12.0 VDC	800 mA	10 mA	2520 mA	76
WU103	4.5-6.0 VDC	15.0 VDC	667 mA	10 mA	2510 mA	80
WU104	4.5-6.0 VDC	±5.0 VDC	±1000 mA	10 mA	2620 mA	76
WU105	4.5-6.0 VDC	±12.0 VDC	±400 mA	10 mA	2520 mA	76
WU106	4.5-6.0 VDC	±15.0 VDC	±333 mA	10 mA	2510 mA	79
WU200	9.0-18.0 VDC	3.3 VDC	3000 mA	10 mA	1030 mA	80
WU201	9.0-36.0 VDC	5.0 VDC	3000 mA	30 mA	1560 mA	80
WU202	9.0-36.0 VDC	12.0 VDC	1250 mA	30 mA	1540 mA	81
WU203	9.0-36.0 VDC	15.0 VDC	1000 mA	30 mA	1525 mA	82
WU204	9.0-36.0 VDC	±5.0 VDC	±1500 mA	30 mA	1560 mA	80
WU205	9.0-36.0 VDC	±12.0 VDC	±625 mA	30 mA	1540 mA	81
WU206	9.0-36.0 VDC	±15.0 VDC	±500 mA	30 mA	1520 mA	82
WU207	9.0-36.0 VDC	5.0/±12.0 VDC	1500/±310 mA	20 mA	1576 mA	79
WU208	9.0-36.0 VDC	5.0/±15 VDC	1500/±250 mA	20 mA	1582 mA	79
WU209	9.0-36.0 VDC	5.0/+12.0/-5.0 VDC	1500/310/500 mA	20 mA	1447 mA	79
WU300	18.0-36.0 VDC	3.3 VDC	3000 mA	10 mA	500 mA	83
WU301	20.0-72.0 VDC	5.0 VDC	3000 mA	20 mA	760 mA	82
WU302	20.0-72.0 VDC	12.0 VDC	1250 mA	20 mA	750 mA	83
WU303	20.0-72.0 VDC	15.0 VDC	1000 mA	20 mA	745 mA	84
WU304	20.0-72.0 VDC	±5.0 VDC	±1500 mA	20 mA	760 mA	82
WU305	20.0-72.0 VDC	±12.0 VDC	±625 mA	20 mA	750 mA	83
WU306	20.0-72.0 VDC	±15.0 VDC	±500 mA	20 mA	745 mA	84
WU307	20.0-72.0 VDC	5.0/±12.0 VDC	1500/±310 mA	15 mA	778 mA	80
WU308	20.0-72.0 VDC	5.0/±15.0 VDC	1500/±250 mA	15 mA	781 mA	80
WU309	20.0-72.0 VDC	5.0/+12.0/-5.0 VDC	1500/310/500 mA	15 mA	715 mA	80
WU400	36.0-72.0 VDC	3.3 VDC	3000 mA	10 mA	245 mA	84

Note: Nominal Input Voltage 5, 12, 24 or 48 VDC

## Mechanical Details

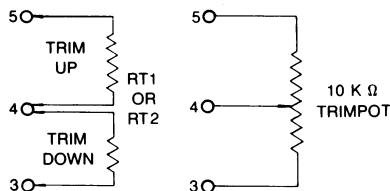
PIN	SINGLE	DUAL	TRIPLE
1	+ Input	+ Input	Disable
2	- Input	- Input	- Input
3	+ Output	+ Output	+ Input
4	Trim	Common	- Output
5	- Output	- Output	Common
6	Disable	Disable	5 VDC Output
7	-	-	+ Output

### REMOTE ON/OFF CONTROL

Logic Compatibility .....CMOS or Open Collector TTL  
 E<sub>C</sub> - ON, .....>+5.5 VDC or Open Circuit  
 E<sub>C</sub> - OFF, .....<1.8 VDC  
 Shutdown Idle Current .....10 mA  
 Input Resistance .....(E<sub>in</sub> 0 VDC to 9 VDC)100KOhm  
 Control Common .....Referenced to input Minus

### EXTERNAL OUTPUT TRIMMING

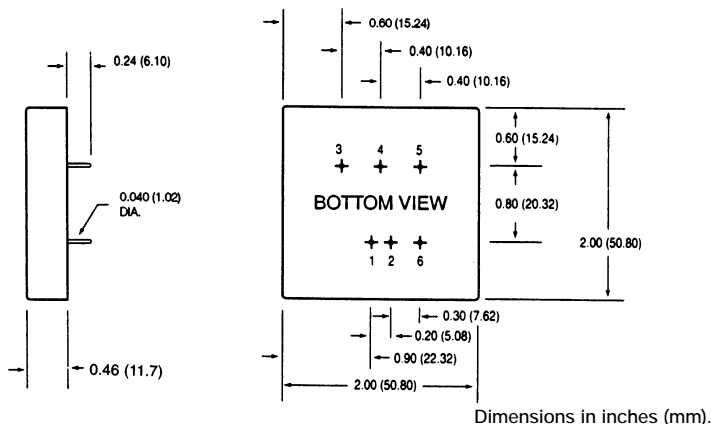
Output may optionally be externally trimmed (±5%) with a fixed resistor or an external trimpot as shown.



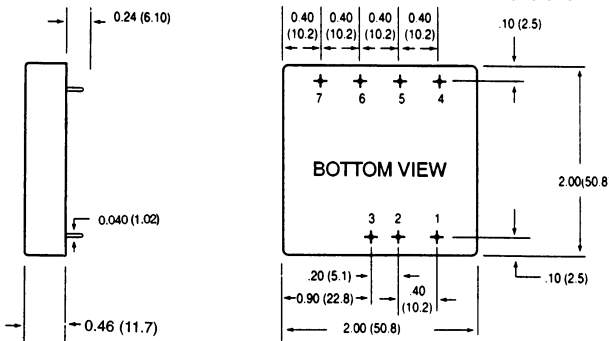
### NOTES:

1. Voltage accuracy on 3VDC and triple outputs ±3% Max. Single outputs can be trimmed ±5%.
2. Load regulation ±2% for dual and triple outputs.
3. Triple outputs require minimum of 10% load for rated performance.
4. Remote on/off standard on triple output units, add suffix "E" to part number for option on single and dual output units.

### SINGLE/DUAL OUTPUT



Dimensions in inches (mm).



### TRIPLE OUTPUT

