

Wide Input DC-DC Converters

10/15 Watts WU Series

THE **XP**ERTS IN POWER



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

Specification

Input

- **Input Voltage Range**
 - 5 V (4.5-6.0 VDC)
 - 12 V (9-36 VDC)
 - 48 V (20-72 VDC)
- **Input Filter**
 - π Network

Output

- **Output Power**
 - 15 Watts (10 W for 5 & 3,3 V versions)
- **Output Voltage**
 - See Table
- **Voltage Accuracy**
 - $\pm 1\%$ max
- **Voltage Trim**
 - $\pm 5\%$ max on single output models
- **Line Regulation**
 - $\pm 1\%$ max
- **Load Regulation**
 - $\pm 1\%$ max single output models,
 - $\pm 2\%$ for dual & triple output models,
 - for 75% load change
- **Ripple & Noise**
 - 1% of Vout max (20 MHz bandwidth)
- **Temperature Coefficient**
 - $\pm 0.02\%/^{\circ}\text{C}$ max
- **Short Circuit Protection**
 - Continuous
- **Remote On/Off**
 - Standard on triple output models,
 - optional on single & dual output models

General

- **Switching Frequency**
 - 100 kHz typical
- **Efficiency**
 - See Table
- **Isolation**
 - 500 V DC input to output
 - (1000 M Ω /80 pF)
- **Dimensions**
 - 2.00" x 2.00" x 0.46"
- **Weight**
 - 80 g

Environmental

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

OUTPUT VOLTAGE & CURRENT RATINGS

WU

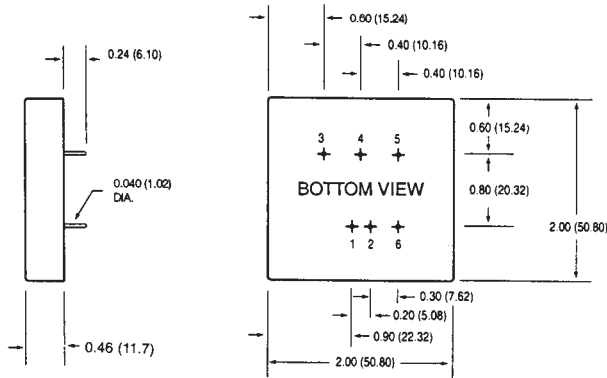
Input Voltage	Output Voltage	Output Current	Input Current ⁽¹⁾		Efficiency	Model Number
			No Load	Full Load		
4.5-6.0 VDC	±15.0 VDC	±333 mA	10 mA	2510 mA	79%	WU106
9-36 VDC	±5.0 VDC	±1500 mA	30 mA	1560 mA	80%	WU204
	±12.0 VDC	±625 mA	30 mA	1540 mA	81%	WU205
	±15.0 VDC	±500 mA	30 mA	1520 mA	82%	WU206
	5.0/±12.0 VDC	1500/±310 mA	20 mA	1576 mA	79%	WU207
	5.0/±5.0 VDC	1500/±250 mA	20 mA	1582 mA	79%	WU208
20-72 VDC	±5.0 VDC	±1500 mA	20 mA	760 mA	82%	WU304
	±12.0 VDC	±625 mA	20 mA	750 mA	83%	WU305
	±15.0 VDC	±500 mA	20 mA	745 mA	84%	WU306
	5.0/±12.0 VDC	1500/±310 mA	15 mA	778 mA	80%	WU307
	5.0/±15.0 VDC	1500/±250 mA	15 mA	781 mA	80%	WU308

Notes

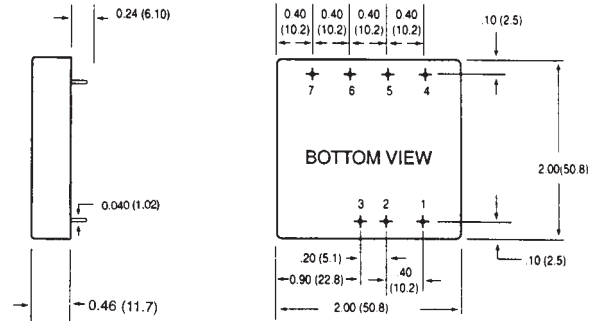
1. Input current is at nominal input voltage.

Mechanical Details

Single & Dual Output Models



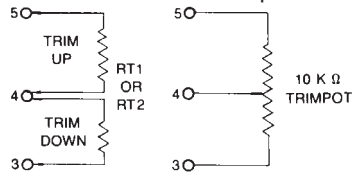
Triple Output Models



Dimensions in inches (mm)

EXTERNAL OUTPUT TRIMMING

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



PIN CONNECTIONS

Pin	Single Output	Dual Output	Triple Output
1	+ Input	+ Input	Remote ON/OFF
2	- Input	- Input	- Input
3	+ Output	+ Output	+ Input
4	Trim	Common	- Output
5	- Output	- Output	Common
6	Remote ON/OFF	Remote ON/OFF	5 VDC Output
7	-	-	+ Output

NOTES:

1. Voltage accuracy on 3 VDC and triple outputs $\pm 3\%$ max. Single outputs can be trimmed $\pm 5\%$.
2. Load regulation $\pm 2\%$ 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 model number for option on single and dual output units.
5. Pin 6 is only fitted on single and dual output models with 'E' suffix.

REMOTE ON/OFF CONTROL

- ON	>5.5 VDC or Open Circuit
- OFF	<1.8 VDC
Shutdown Idle Current	10 mA
Input Resistance	(E_{in} 0 VDC to 9 VDC) 100 k Ω
Remote ON/OFF Common	Referenced to -Input

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