

# DC/DC Converters

## 7.5 Watts WR Series

**XPiQ inc.**

Intelligent Design Quality Product



2:1 Input Range

1500 VDC Isolation

Efficiency to 83%

Input  $\pi$  Filter

Fully Regulated Outputs

24 Pin-Dip Package

## Specification

### Input

- Input Voltage Range • 12 V (9-18 VDC)  
24 V (18-36 VDC)  
48 V (36-72 VDC)
- Input Filter •  $\pi$  Network

### Output

- Output Power • 7.5 Watts
- Output Voltage • 5, 12 & 15 V single & dual output models
- Voltage Accuracy •  $\pm 2.0\%$  max
- Line Regulation •  $\pm 0.2\%$  max, for 90% load change
- Load Regulation •  $\pm 0.5\%$  max single output models,  
 $\pm 1.0\%$  max dual output models,  
for 75% load change
- Ripple & Noise • 100 mV peak to peak max  
(20 MHz bandwidth)
- Temperature Coefficient •  $\pm 0.05\%/^{\circ}\text{C}$  max
- Short Circuit Protection • Continuous

### General

- Switching Frequency • 200 kHz typical
- Efficiency • See Table
- Isolation • 1500 VDC min input to output  
(1000 M $\Omega$ )
- Dimensions • 0.80" x 1.25" x 0.40"
- Weight • 18 g

### Environmental

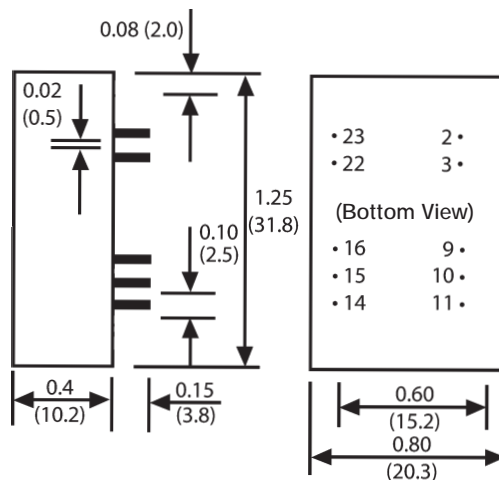
- Operating Temperature •  $-25^{\circ}\text{C}$  to  $+71^{\circ}\text{C}$
- Case Temperature •  $+100^{\circ}\text{C}$  max
- Storage Temperature •  $-40^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$

OUTPUT VOLTAGE & CURRENT RATINGS						WR
Input Voltage <sup>(1)</sup>	Output Voltage	Output Current	Input Current <sup>(2)</sup>		Efficiency	Model Number
			No Load	Full Load		
9-18 VDC	5 VDC	1500 mA	25 mA	801 mA	78%	<b>WR201</b>
	12 VDC	625 mA	25 mA	762 mA	82%	<b>WR202</b>
	15 VDC	500 mA	25 mA	762 mA	82%	WR203
	±5 VDC	±750 mA	30 mA	791 mA	79%	WR204
	±12 VDC	±310 mA	30 mA	753 mA	83%	<b>WR205</b>
	±15 VDC	±250 mA	30 mA	753 mA	83%	WR206
18-36 VDC	5 VDC	1500 mA	20 mA	396 mA	79%	<b>WR301</b>
	12 VDC	625 mA	20 mA	381 mA	82%	<b>WR302</b>
	15 VDC	500 mA	20 mA	381 mA	82%	WR303
	±5 VDC	±750 mA	25 mA	386 mA	81%	WR304
	±12 VDC	±310 mA	25 mA	377 mA	83%	<b>WR305</b>
	±15 VDC	±250 mA	25 mA	377 mA	83%	WR306
36-72 VDC	5 VDC	1500 mA	10 mA	195 mA	80%	<b>WR401</b>
	12 VDC	625 mA	10 mA	190 mA	82%	<b>WR402</b>
	15 VDC	500 mA	10 mA	190 mA	82%	WR403
	±5 VDC	±750 mA	15 mA	193 mA	81%	WR404
	±12 VDC	±310 mA	15 mA	188 mA	83%	<b>WR405</b>
	±15 VDC	±250 mA	15 mA	188 mA	83%	WR406

**Notes**

1. Nominal input voltage is 12 VDC for WR2XX models, 24 VDC for WR3XX models and 48 VDC for WR4XX models.
2. Input current is at nominal input voltage.
3. Part numbers in bold are standard stock models, others are build to order.

**Mechanical Details**



Dimensions in inches (mm).

PIN CONNECTIONS		
Pin	Single Output	Dual Output
2	- V Input	- V Input
3	- V Input	- V Input
9	N/C	Common
10	N/C	N/C
11	N/C	- V Output
14	+ V Output	+ V Output
15	N/C	N/C
16	- V Output	Common
22	+ V Input	+ V Input
23	+ V Input	+ V Input