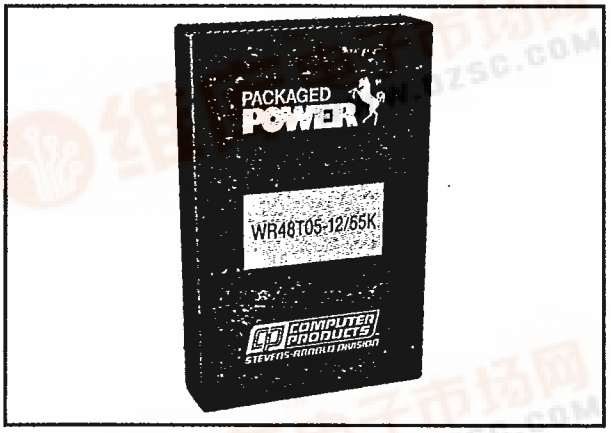


NEW!

WRK SERIES

Triple and Quad Output

- **Low Profile 0.91 Inch High**
- **Efficiencies to 84%**
- **2:1 Input Range**
- **PC or Chassis Mounting**
- **OVP on All Outputs**
- **Pi Input Filter**

WRK Series devices are efficient, high-power DC/DC converters with triple and quadruple outputs supplying 50 to 60 watts. Their low-profile 3.5 × 5.5 × 0.91 inch package provides a power density of 3.4 watts per cubic inch, nearly twice that of other comparably rated units. Efficiencies range from 80 to 84%. These converters feature unique dual power stages utilizing forward converters with MOSFET switching at 100 kHz. A Pi network input filter is also included. High efficiency is virtually constant down to 30% output loading.
Other features include output short circuit protection, overvoltage protection, remote sensing of primary output, input surge protection, and remote ON/OFF control. The 2 to 1 input voltage ranges are 9 to 18 VDC, 18 to 36 VDC and 36 to 72 VDC.

STOCKED BY YOUR LOCAL DISTRIBUTOR
See list on pages 175 & 176

COMPUTER PRODUCTS™
STEVENS-ARNOLD INC.
(617) 268-1170

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.

OUTPUT SPECIFICATIONS

Voltage Accuracy, Primary Outputs	±1.0%, max.
Auxiliary Output Balance[1]	±2.0%, max.
Voltage Adjustment[2]	±10%
Load Regulation, FL−1/4L	
Single Output	±1.0%, max.
Dual Output	±2.0%, max.
−5V, Output	±5.0%, max.
Line Regulation, HL−LL	±0.5%, max.
−5V Output	±1.0%, max.
Ripple and Noise, 20 MHz BW	10 mV RMS, max., 75 mV P-P, max.
Temperature Coefficient	±0.02%/°C, max.
Voltage Stability, 24 Hours	±0.05%, max.
Transient Response[4] ±1% Error Band	
25% Step Load Change	500 μsec., max.
Remote Sense[5]	Output 1
Short Circuit Protection, All Outputs	Indefinite
Overvoltage Protection[6]	OVP Clamp All Outputs

INPUT SPECIFICATIONS

Input Voltage Range	See Table
Input Filter	Pi Network
Surge Protection	Transient Clamp
Reverse Voltage Protection	Internal Shunt Diode Use External Fuse

GENERAL SPECIFICATIONS

Isolation Voltage, Input to Output	500 VDC, min.
Input to Case	250 VDC, min.
Isolation Resistance, Input to Output	10^9 ohms, min.
Input to Case	10^6 ohms, min.
Switching Frequency	100 kHz

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range	
Ambient	−25°C to +55°C
With Optional Heatsink	−25°C to +71°C
Case	−25°C to +85°C
Derating, above 85°C Case	Linearly to Zero Power at +100°C
Storage Temperature Range	−55°C to +105°C
Cooling	Free-Air Convection or Conduction

PHYSICAL SPECIFICATIONS

Weight, without Heatsink	16 oz. (454 grams)
Case Material	Black Coated Aluminum with Non-Conductive Base

NOTES:
1. Maximum difference between the voltage magnitudes of; outputs 2 & 3 for triples; outputs 1 & 2 and 3 & 4 for quads.
2. All models except triples have provision for output voltage adjustment. See Connection Table and External Output Trimming Information.
3. No minimum load required for operation.
4. Any output.
5. Can compensate up to 1V drop between converter and load. Not available on quads.
6. 5V outputs clamped at 6.8V; 12 or 15V outputs clamped at 18V.

TWO-YEAR WARRANTY

COMPUTER PRODUCTS
STEVENS-ARNOLD INC.

T-57-11

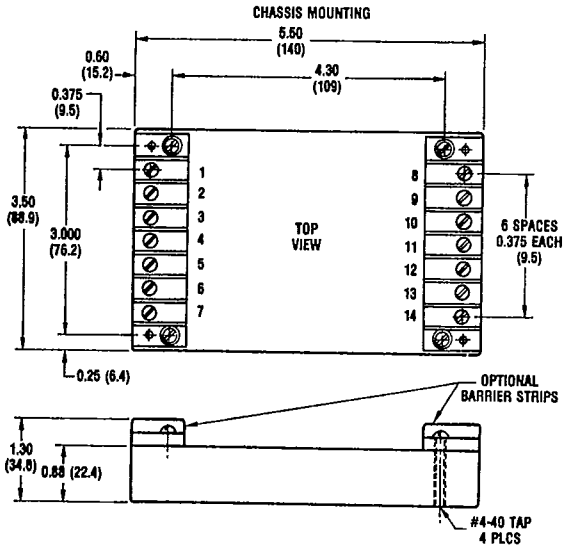
60 Watt DC/DC Converters

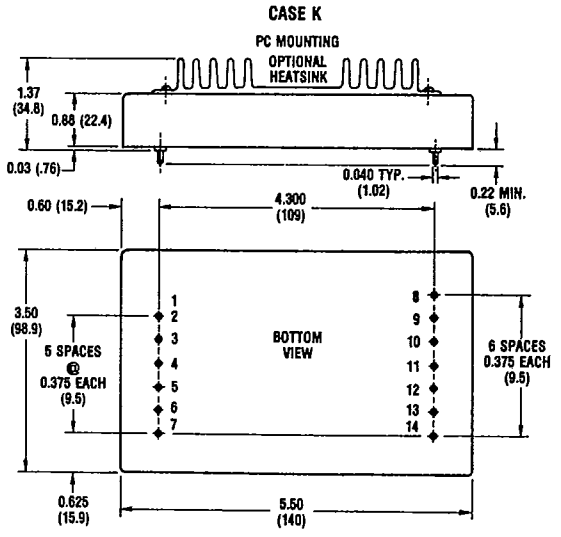
INPUT VOLTAGE	OUTPUT 1	OUTPUT 2	OUTPUT 3	OUTPUT 4	INPUT CURRENT[1] NO LOAD	INPUT CURRENT[1] FULL LOAD	% EFF	OUTPUT POWER	MODEL NUMBER[2]
TRIPLE OUTPUT									
	PRIMARY	AUXILIARY	PRIMARY						
9-18 VDC	+ 5V @ 5.0A	−12V @ 1.25A	+12V @ 1.25A		70 mA	5.72 A	80	55W	WR12T05-12/55K
9-18 VDC	+ 5V @ 5.0A	−15V @ 1.0 A	+15V @ 1.0 A		70 mA	5.72 A	80	55W	WR12T05-15/55K
9-18 VDC	+12V @ 2.5A	− 5V @ 0.5 A	+ 5V @ 5.0 A		70 mA	5.90 A	81	57.5W	WR12T12-05/55K
9-18 VDC	+15V @ 2.0A	− 5V @ 0.5 A	+ 5V @ 5.0 A		70 mA	5.90 A	81	57.5W	WR12T15-05/55K
18-36 VDC	+ 5V @ 5.0A	−12V @ 1.25A	+12V @ 1.25A		45 mA	2.83 A	81	55W	WR24T05-12/55K
18-36 VDC	+ 5V @ 5.0A	−15V @ 1.0 A	+15V @ 1.0 A		45 mA	2.83 A	81	55W	WR24T05-15/55K
18-36 VDC	+12V @ 2.5A	− 5V @ 0.5 A	+ 5V @ 5.0 A		45 mA	2.92 A	82	57.5W	WR24T12-05/55K
18-36 VDC	+15V @ 2.0A	− 5V @ 0.5 A	+ 5V @ 5.0 A		45 mA	2.92 A	82	57.5W	WR24T15-05/55K
36-72 VDC	+ 5V @ 5.0A	−12V @ 1.25A	+12V @ 1.25A		35 mA	1.40 A	82	55W	WR48T05-12/55K
36-72 VDC	+ 5V @ 5.0A	−15V @ 1.0 A	+15V @ 1.0 A		35 mA	1.40 A	82	55W	WR48T05-15/55K
36-72 VDC	+12V @ 2.5A	− 5V @ 0.5 A	+ 5V @ 5.0 A		35 mA	1.46 A	83	57.5W	WR48T12-05/55K
36-72 VDC	+15V @ 2.0A	− 5V @ 0.5 A	+ 5V @ 5.0 A		35 mA	1.46 A	83	57.5W	WR48T15-05/55K
QUADRUPLE OUTPUT									
	AUXILIARY	PRIMARY	AUXILIARY	PRIMARY					
9-18 VDC	− 5V @ 0.5A	+ 5V @ 5.0 A	−12V @ 1.25A	+12V @ 1.25A	90 mA	5.92 A	81	57.5W	WR12Q05-12/55K
9-18 VDC	− 5V @ 0.5A	+ 5V @ 5.0 A	−15V @ 1.0 A	+15V @ 1.0 A	90 mA	5.92 A	81	57.5W	WR12Q05-15/60K
18-36 VDC	− 5V @ 0.5A	+ 5V @ 5.0 A	−12V @ 1.25A	+12V @ 1.25A	55 mA	2.92 A	82	57.5W	WR24Q05-12/55K
18-36 VDC	− 5V @ 0.5A	+ 5V @ 5.0 A	−15V @ 1.0 A	+15V @ 1.0 A	55 mA	2.92 A	82	57.5W	WR24Q05-15/60K
36-72 VDC	− 5V @ 0.5A	+ 5V @ 5.0 A	−12V @ 1.25A	+12V @ 1.25A	40 mA	1.44 A	83	57.5W	WR48Q05-12/55K
36-72 VDC	− 5V @ 0.5A	+ 5V @ 5.0 A	−15V @ 1.0 A	+15V @ 1.0 A	40 mA	1.44 A	83	57.5W	WR48Q05-15/60K

NOTES: 1. At Nominal Input Voltage, 12, 24 or 48 VDC.

Other Input/Output Combinations Available. Consult Factory.

2: To order the optional heatsink on the PC mount model, add the suffix "1" to the model number. To order the chassis mount version with the barrier terminal strip, add the suffix "3". Limit one option per unit.





CONNECTION TABLE					
TERM	TRIPLE	QUAD	TERM	TRIPLE	QUAD
	INPUTS			OUTPUTS	
1	No Pin	*	8	− Sense 1	− Output 1
2	− Input	*	9	− Output 1	Com 1 & 2
3	− Input	*	10	+ Output 1	+ Output 2
4	+ Input	*	11	+ Sense 1	Trim 1 & 2
5	+ Input	*	12	− Output 2	− Output 3
6	Control	*	13	Com 2 & 3	Com 3 & 4
7	Case	*	14	+ Output 3	+ Output 4

*Connection is same as triple column

Tolerance .xx = ±0.02
.xxx = ±0.005

ALL DIMENSIONS IN INCHES (mm)