

## ZF - SERIES

Single Output DC/DC Converter  
 2" x 1.6" x 0.4"  
 up to 30 Watts Output

### Product Features

- Single DC/DC Converter, up to 30Watts
- Ideal for Telecom and Networking Applications
- 2:1 Input Range, High Efficiency
- Industry Compatible Pin Out, 2" x 1.6" Form Factor
- Remote On / Off, TTL, Trimmable +/-10%
- Six Side Shielded, Low Profile 0.4" Height
- No external Input or Output Filtering required
- Regulated Output
- 1600VDC I/O Isolation, UL, CUL, TUV, CE Approvals pending

### TYPICAL APPLICATIONS:

- 24Vdc or 48Vdc Telecom
- On-Board Distributed Power
- Low Profile & Height PCB mount

**TABLE 1**

Model Number	Input Voltage VDC	Output Volts /Amps VDC	Effic. %
ZF24S1.8-6000	18-36	1.8 // 6	82
ZF24S2.5-6000	18-36	2.5 // 6	85
ZF24S3.3-6000	18-36	3.3 // 6	86
ZF24S5-6000	18-36	5 // 6	88
ZF24S12-2500	18-36	12 // 2.5	91
ZF24S15-2000	18-36	15//2.0	91
ZF48S1.8-6000	36-75	1.8 // 6	83
ZF48S2.5-6000	36-75	2.5 // 6	85
ZF48S3.3-6000	36-75	3.3// 6	87
ZF48S5-6000	36-75	5 // 6	89
ZF48S12-2500	36-75	12 // 2.5	91
ZF48S15-2000	36-75	15 // 2.0	91



### Brief Overview

The ZF Series of high efficiency DC/DC converters are available as single output versions, 1.8VDC, 2.5VDC up to 15 VDC, with 30 Watts of output power. The product is ideal for Telecom and Networking applications. The converter is designed for a 2:1 input range, either nominal 24 Volt (18VDC -36VDC) or nominal 48VDC (36VDC-75VDC). The converter is PCB mountable, the package has a form factor of 2"x 1.6"x .04". The standard specifications include the Pi-input filter, external trimming of +/- 10%, excellent load regulation, and short circuit protection. The isolation voltage meets the >1600VDC telecom requirements.

### SPECIFICATIONS:

Nominal Input:	48VDC (36-75VDC) 24VDC (18-36VDC)
Output Voltage:	see Table 1
Output Power:	30W
Efficiency:	(see table)
Isolation Voltage:	1600VDC
Operating Temperature:	-25C to +71C
Max. Case Temp.	100C
Dimensions:	2" x 1.6" x 0.4"

*For further information or Application Support:*

**[www.wallindustries.com](http://www.wallindustries.com)**

or call 1-888-597-WALL

Specification	Method	Min.	Typ.	Max.	Units
INPUT VOLTAGE:	48V version	36	48	75	Volts
	24V version	18	24	36	Volts
REMOTE ON/OFF	TTL				TTL logic
INPUT FILTER	Pi-Filter				
OUTPUT VOLTAGE			see table		Volts
OUTPUT VOLTAGE Set Point			+/- 1%		% of Vout
OUTPUT CURRENT			see table		A
OVERCURRENT PROTECTION	Limiting				% of Iout
OUTPUT RIPPLE	20MHz BW		<70mV p-p		mV peak/peak
SHORT CIRCUIT PROTECTION	continuous				
LINE REGULATION	HL / LL		+/- 0.2%		
LOAD REGULATION	10-100% load		+/- 0.5%		
TRANSIENT RESPONSE	within +/-1% Vout		<500u sec		
OUTPUT TRIM	external Res.		+/- 10%		% of Vout
EFFICIENCY			see table		
ISOLATION VOLTAGE			>1600VDC		VDC / 10sec
ISOLATION RESISTANCE	In/Out/ >100MOhms				
SWITCHING FREQUENCY			300kHz typ.		
OPERATING TEMPERATURE		-25		+71	degree C
STORAGE TEMPERATURE		-55		+105	degree C
WEIGHT			~ 2 oz		
DIMENSIONS	case w/o pin		2"x1.6"x0.4"		inches
CASE MATERIAL					Ni coated Cu

*All case and Pin-to-Case dimensions are for reference only, unless otherwise noted. All DC/DC converters should be externally fused at the front end for protection. Significant capacitive load at the output of the converter may inhibit the start-up and operation, consult factory.*

**Pin Assignments:**

Pin	
1	+Vin
2	-Vin
3	Rem
4	No Pin
5	+Vout
6	-Vout
7	Trim

