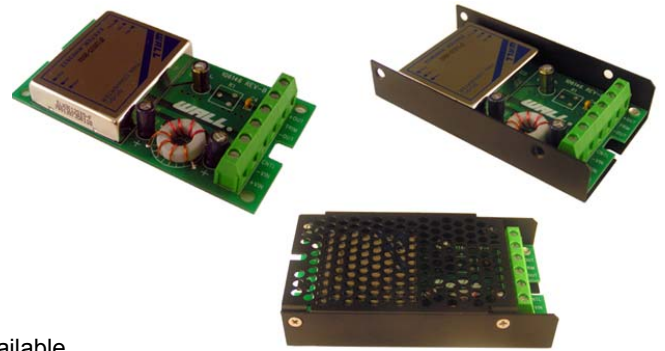


**FEATURES**

- 15 Watts Output Power
- Output Current up to 3A
- High Efficiency up to 82%
- Fixed Switching Frequency
- Six-Sided Continuous Shielding
- 4:1 Ultra Wide Input Voltage Range
- ISO9001 Certified Manufacturing Facilities
- **Call Factory for More Output Power Options**
- Compliant to RoHS EU Directive 2002/95/EC
- UL60950-1, EN60950-1, and IEC60950-1 Licensed
- CE Mark Meets 2006/95/EC, 93/68/EEC, and 89/336 EEC
- Chassis Mount Options: Open Frame, U Channel, and Enclosed Types Available

**APPLICATIONS**

- Measurement
- Wireless Network
- Telecom/Datacom
- Industry Control System
- Semiconductor Equipment



**SPECIFICATIONS: CMYFW15 Series**

*All specifications apply @ 25°C ambient unless otherwise noted*

**INPUT SPECIFICATIONS**

Input Voltage Range	24V nominal input	9-36VDC
	48V nominal input	18-75VDC
Input Surge Voltage (100ms max)	24V input	50VDC
	48V input	100VDC
Input Reflected Ripple Current (nominal Vin and full load)		20mA <sub>p-p</sub>
Start Up Time (nominal Vin and constant resistive load)		20ms typ.
Remote ON/OFF (Note 7)		
(Positive Logic)	DC-DC ON	Open or 3.5V < Vr < 12V
	DC-DC OFF	Short or 0V < Vr < 1.2V
Input Current of Remote Control Pin (nominal Vin)		-0.5mA ~ +0.5mA
Remote Off Input Current (nominal Vin)		20mA

**OUTPUT SPECIFICATIONS**

Output Voltage	see table
Voltage Accuracy (nominal Vin and full load)	±1%
Voltage Adjustability	±10%
Output Current	see table
Output Power	15 watts max.
Line Regulation (LL to HL at FL)	±0.2%
Load Regulation (min load to full load)	±0.5%
Minimum Load (Note 6)	see table
Ripple/Noise (20 MHz BW)	75mV <sub>p-p</sub>
Temperature Coefficient	±0.02% / °C max.
Transient Response Recovery Time (25% load step)	250us

**PROTECTION SPECIFICATIONS**

Over Voltage Protection (zener diode clamp)	5V output	6.2V
	12V output	15V
	15V output	18V
Over Load Protection (% of full load at nominal input)		150% max.
Short Circuit Protection		Hiccup, automatic recovery

**GENERAL SPECIFICATIONS**

Efficiency	see table
Switching Frequency	270KHz typ.
Isolation Voltage (Input to Output)	1600VDC min.
Isolation Resistance	10 <sup>9</sup> ohms min.
Isolation Capacitance	300pF max.

**ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature	-40°C ~ +85°C (with derating)
Storage Temperature	-55°C ~ +105°C
Maximum Case Temperature	100°C
Relative Humidity	5% to 95% RH
Thermal Impedance (Note 8)	
Natural Convection	10°C / Watt
Natural Convection with Heat-Sink	8.24°C / Watt
Thermal Shock	MIL-STD-810F
Vibration	10~55Hz, 10G, 30 minutes along X, Y, and Z
MTBF (Note 1)	2.041 X 10 <sup>6</sup> hrs

**PHYSICAL SPECIFICATIONS**

Potting material of the DC/DC Converter	Epoxy (UL94-V0)
Shielding of the DC/DC Converter	six-sided
Weight	Approximately 7oz
Dimensions	4.00(L) x 2.25(W) x 0.81(H) inches

**SAFETY & EMC**

Safety Standard Pending	IEC60950-1, UL60950-1, EN60950-1
EM	EN55022 Class A
ESD	EN61000-4-2 Air ± 8KV Criteria B
	Contact ± 6KV
Radiated Immunity	EN61000-4-3 10V/m Perf. Criteria A
Fast Transient	EN61000-4-4 ±2KV Perf. Criteria B
Surge	EN61000-4-5 ±1KV Perf. Criteria B
Conducted Immunity	EN61000-4-6 10 Vrms Perf. Criteria A

*Due to advances in technology, specifications subject to change without notice*

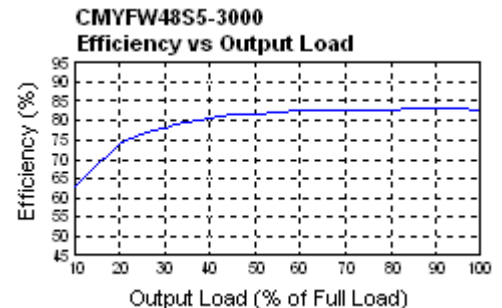
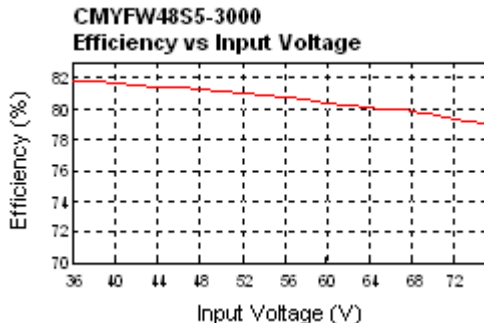
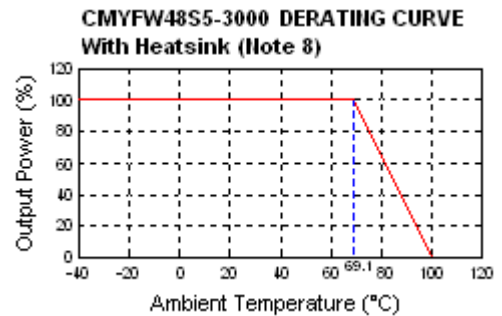
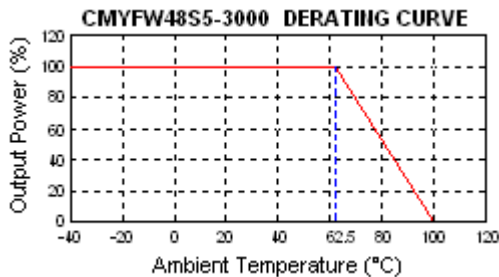
**OUTPUT VOLTAGE / CURRENT RATING CHART**

Model Number	Input Range	Output Voltage	Output Current		Output <sup>(2)</sup> Ripple & Noise	Input Current		Efficiency <sup>(4)</sup>	Capacitor <sup>(5)</sup> Load max
			Min. load	Full load		No load <sup>(3)</sup>	Full load <sup>(2)</sup>		
CMYFW24S5-3000	24 VDC (9-36 VDC)	5 VDC	210mA	3000mA	75mVp-p	20mA	822mA	80%	6800uF
CMYFW24S12-1250		12 VDC	100mA	1250mA	75mVp-p	10mA	801mA	82%	890uF
CMYFW24S15-1000		15 VDC	80mA	1000mA	75mVp-p	20mA	801mA	82%	570uF
CMYFW48S5-3000	48VDC (18-75 VDC)	5 VDC	210mA	3000mA	75mVp-p	15mA	411mA	80%	6800uF
CMYFW48S12-1250		12 VDC	100mA	1250mA	75mVp-p	15mA	401mA	82%	890uF
CMYFW48S15-1000		15 VDC	80mA	1000mA	75mVp-p	10mA	401mA	82%	570uF

**NOTES**

1. BELLCORE TR-NWT-000332. Case I: 50% Stress, Temperature at 40°C. (Ground fixed and controlled environment).
2. Maximum value at nominal input voltage and full load.
3. Typical value at nominal input voltage and no load.
4. Typical value at nominal input voltage and full load.
5. Test by minimum Vin and constant resistive load.
6. The output requires a minimum loading to maintain specified regulation. Operation under no-load condition will not damage these devices, however they may not meet all listed specifications.
7. The ON/OFF control pin voltage is reference to -Vin.
8. Heat-sink is optional, please contact factory for ordering details.
9. Chassis Mount Options: No suffix for open frame, "U" suffix for U Channel, and "E" suffix for Enclosed type.

**DERATING CURVES & EFFICIENCY GRAPHS**



**MECHANICAL DRAWING**

Unit: inches [mm]

