

- 4:1 Input Range
- Efficiency to 91%
- 2" x 1" six sided shield metal case
- continuous short circuit Protection
- meets EN60950-1



Model Number	Input Voltage	Output Voltage	Output Current	Input Current		Capacitor Load max	% Eff.
				No Load	Full Load		
TP30WS-24S3.3	9 -36 V	3.3 VDC	7500 mA	100 mA	1200 mA	7500µF	88.5
TP30WS-24S05	9 -36 V	5 VDC	6000 mA	110 mA	1421 mA	6000µF	89.5
TP30WS-24S12	9 -36 V	12 VDC	2500 mA	35 mA	1405 mA	2500µF	90.5
TP30WS-24S15	9 -36 V	15 VDC	2000 mA	35 mA	1405 mA	2000µF	91
TP30WS-24D12	9 -36 V	±12 VDC	±1250mA	35 mA	1437 mA	±1250µF	90
TP30WS-24D15	9 -36 V	±15 VDC	±1000mA	35 mA	1437 mA	±1000µF	90
TP30WS-48S3.3	18 – 75 V	3.3 VDC	7500 mA	55 mA	600 mA	7500µF	88
TP30WS-48S05	18 – 75 V	5 VDC	6000 mA	55 mA	711 mA	6000µF	90
TP30WS-48S12	18 – 75 V	12 VDC	2500 mA	25 mA	695 mA	2500µF	90
TP30WS-48S15	18 – 75 V	15 VDC	2000 mA	20 mA	688 mA	2000µF	90.5
TP30WS-48D12	18 – 75 V	±12 VDC	±1250mA	25 mA	711 mA	±1250µF	90.5
TP30WS-48D15	18 – 75 V	±15 VDC	±1000mA	20 mA	711 mA	±1000µF	90

All Specifications are Typical at Nominal Line, Full load, and 25°C Unless Otherwise Noted / © TECHNO-PROJEKT 2010

INPUT SPECIFICATIONS

INPUT UNDER-VOLTAGE LOCKOUT	24Vin power down.....8.0V typ
	24Vin power up8.8V typ
	48Vin power down 16V typ
	48Vin power up 17V typ
INPUT SURGE-VOLTAGE (100ms max)	24Vin50V max
	48Vin 100V max
INPUT FILTER.....	PI Type
POSITIVE LOGIC REMOTE ON/OFF - CONTROL (NOTE 3)	

OUTPUT SPECIFICATIONS

Voltage Accuracy.....		±1% max
Voltage Balance (Dual)		±1% max
Transient Response: 75% ~ 100% Step Load Change		
Error Band	±5% Vout nominal, Recovery Time	< 250us
RIPPLE AND NOISE, 20MHz BW (measured with 0.1µF MLCC)		
Vout = 3.3V & 5V.....		max. 75mVpp.
Vout = 12V & 15V, ± 12V & ± 15V		max.100mVpp.
Temperature Coefficient		±0.02%/C max
Line Regulation ¹	single&dual	±0.2%.
Load Regulation ²	single	±0.2%.
	Dual	±0.5%.
Cross Regulation(Dual output) Load cross variation 10%/100%.....		±5% max.
Over Voltage Protection.....	Zenerdiode or TVS Clamp	
Current Limit	110% - 160% Nominal Output	
Short Circuit Protection	continuous (Hiccup mode)	
External Trim Adj. Range (single output models only)		±10%
Start up time.....		10ms typ

GENERAL SPECIFICATIONS

ISOLATION VOLTAGE.....		1500VDC max.
ISOLATION RESISTANCE		10 ⁹ Ohm
ISOLATION CAPACITANCE		1000pF typ.
SWITCHING FREQUENCY.....		430KHz typ.
EMI / RFI ⁴	conductive EMI meets EN55022 class A	
OPERATING TEMPERATURE RANGE.....		-40°C TO +75°C
DERATING, ABOVE 65°C	LINEARY TO ZERO POWER AT 105 °C	
CASE TEMPERATURE ⁵		105°Cmax.
THERMAL SHUT DOWN		110°Cmax.
STORAGE TEMPERATURE RANGE.....		-55°C TO +125°C
CASE MATERIAL	Black Coated Copper with Non-Conductive Base	
DIMENSIONS	2,00×1,00×0,40 INCHES (50.8 × 25.4 × 10.2mm)	

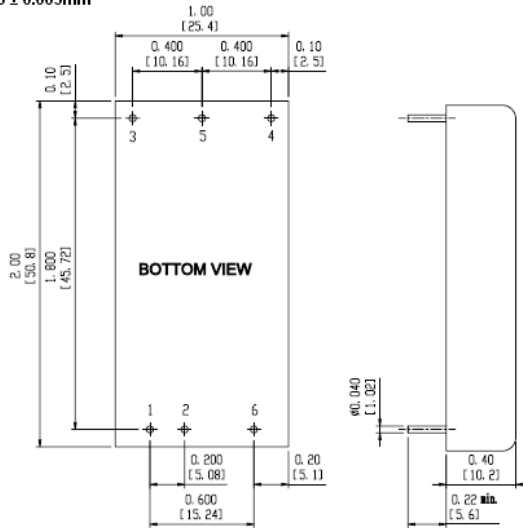
NOTE:

1. Measured From High Line To Low Line
2. Measured From Full Load To min Load
3. Suffix "N" to the Model Number with Negative Logic Remote ON/OFF
4. Meets EN55022A class A with external capacitor
5. Maximum case temperature under any operating conditions should not exceed 105°C

MECHANICAL SPECIFICATIONS

NOTE: Pin Size = 0.02" (0.5mm) Ø

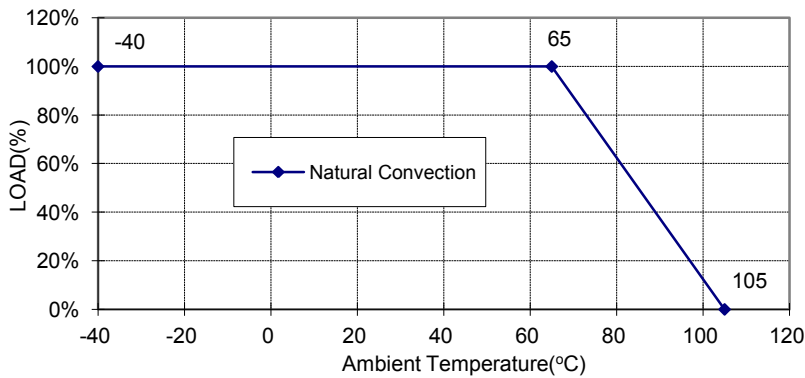
All Dimensions In Inches (mm)
 Tolerance Inches X.XX= ±0.02, X.XXX= ±0.010
 Millimeters X.X= ±0.5, X.XX= ±0.25
 Pin Diameter: 1.0 ± 0.005mm



PIN CONNECTION		
Pin	Single	Dual
1	+Vin	+Vin
2	-Vin	-Vin
3	+Vout	+Vout
4	Trim	-Vout
5	-Vout	Common
6	Remote ON/OFF	

POWER DERATING

Typical Derating curve for Natural Convection



REMOTE ON/OFF CONTROL

Logic Compatibility CMOS or Open Collector TTL, ref. to -Vin

Positive Logic Remote ON/OFF

Negative Logic Remote ON/OFF

Module ON >3.5Vdc to 75Vdc or Open Circuit
 Module OFF <1.2Vdc

Module ON <1.2Vdc
 Module OFF >3.5Vdc to 75Vdc or Open Circuit