

WT Series



- 2:1 Input Range
- Optional 4:1 Input Range
- Isolated Outputs
- Efficiency to 82%
- Fully Regulated Outputs
- Optional 3 kVDC Isolation
- UL Approved Versions

Specification

Input

Input Voltage Range	<ul style="list-style-type: none"> • 12 V (9-18 or 9-36 VDC - A version) • 24 V (18-36 or 18-72 VDC - A version) • 48 V (36-72 VDC)
Input Current (no load)	<ul style="list-style-type: none"> • See table
Input Filter	<ul style="list-style-type: none"> • Pi network
Undervoltage Lockout	<ul style="list-style-type: none"> • Turn On > 65% nominal input • Turn Off < 63% nominal input

Output

Output Voltage	<ul style="list-style-type: none"> • see tables
Output Voltage Balance	<ul style="list-style-type: none"> • $\pm 1\%$ max, dual output models
Initial Set Accuracy	<ul style="list-style-type: none"> • $\pm 2\%$ max
Start Up Rise Time	<ul style="list-style-type: none"> • 3 ms max
Line Regulation	<ul style="list-style-type: none"> • $\pm 0.5\%$ max from high line to low line
Load Regulation	<ul style="list-style-type: none"> • $\pm 0.5\%$ max for 10-100% load change for single output models, • $\pm 1.0\%$ max for 25-100% load change for dual output models
Cross Regulation	<ul style="list-style-type: none"> • $\pm 2.2\%$ on dual output models
Transient Response	<ul style="list-style-type: none"> • <1.0% max deviation, recovering within 200 μs for a 50% load change
Ripple & Noise	<ul style="list-style-type: none"> • 100 or 1.0% pk-pk, whichever is greater, 20MHz BW
Short Circuit Protection	<ul style="list-style-type: none"> • Continuous with auto recovery
Temperature Coefficient	<ul style="list-style-type: none"> • ± 0.05 /$^{\circ}$C max

General

Efficiency	<ul style="list-style-type: none"> • See table
Isolation	<ul style="list-style-type: none"> • 500 VDC Input to Output (1000 MΩ/80 pF) • Optional high isolation version, 3000 VDC Input to Output, add suffix 'X'
Switching Frequency	<ul style="list-style-type: none"> • 100 kHz typical
MTBF	<ul style="list-style-type: none"> • 1,000 kHrs to MIL-HDBK-217F

Environmental

Operating Temperature	<ul style="list-style-type: none"> • -25 $^{\circ}$C to +70 $^{\circ}$C (see derating curve)
Case Temperature	<ul style="list-style-type: none"> • +95 $^{\circ}$C max
Storage Temperature	<ul style="list-style-type: none"> • -40 $^{\circ}$C to +100 $^{\circ}$C

EMC & Safety

Emissions	<ul style="list-style-type: none"> • EN55022, level A conducted • EN55022, level A radiated
ESD Immunity	<ul style="list-style-type: none"> • EN61000-4-2, level 2 • Perf Criteria A
Radiated Immunity	<ul style="list-style-type: none"> • EN61000-4-3 3 V/m • Perf Criteria A
Conducted Immunity	<ul style="list-style-type: none"> • EN61000-4-6 3 V rms • Perf Criteria A
Safety	<ul style="list-style-type: none"> • UL1950 (for XU versions only)

Models and Ratings

Input Voltage ^(1,2,4)	Output Voltage	Output Current	Input Current ⁽⁶⁾		Efficiency	Model Number ⁽³⁾
			No Load	Full Load		
9-18 VDC	3.3 VDC	1000 mA	7.5 mA	393 mA	70%	WT200
	5.0 VDC	1000 mA	7.5 mA	545 mA	76%	WT201
	12.0 VDC	470 mA	7.5 mA	585 mA	80%	WT202
	15.0 VDC	400 mA	7.5 mA	625 mA	80%	WT203
	±5.0 VDC	±500 mA	12.0 mA	545 mA	76%	WT204
	±12.0 VDC	±230 mA	12.0 mA	575 mA	80%	WT205
	±15.0 VDC	±190 mA	12.0 mA	590 mA	80%	WT206
18-36 VDC	3.3 VDC	1000 mA	5.0 mA	197 mA	70%	WT300
	5.0 VDC	1000 mA	5.0 mA	265 mA	78%	WT301
	12.0 VDC	470 mA	5.0 mA	285 mA	82%	WT302
	15.0 VDC	400 mA	5.0 mA	305 mA	82%	WT303
	±5.0 VDC	±500 mA	7.5 mA	265 mA	78%	WT304
	±12.0 VDC	±230 mA	7.5 mA	285 mA	81%	WT305
	±15.0 VDC	±190 mA	7.5 mA	295 mA	81%	WT306
36-72 VDC	3.3 VDC	1000 mA	2.0 mA	98 mA	70%	WT400
	5.0 VDC	1000 mA	2.0 mA	133 mA	78%	WT401
	12.0 VDC	470 mA	2.0 mA	145 mA	81%	WT402
	15.0 VDC	400 mA	2.0 mA	154 mA	81%	WT403
	±5.0 VDC	±500 mA	3.0 mA	133 mA	78%	WT404
	±12.0 VDC	±230 mA	3.0 mA	142 mA	81%	WT405
	±15.0 VDC	±190 mA	3.0 mA	147 mA	81%	WT406

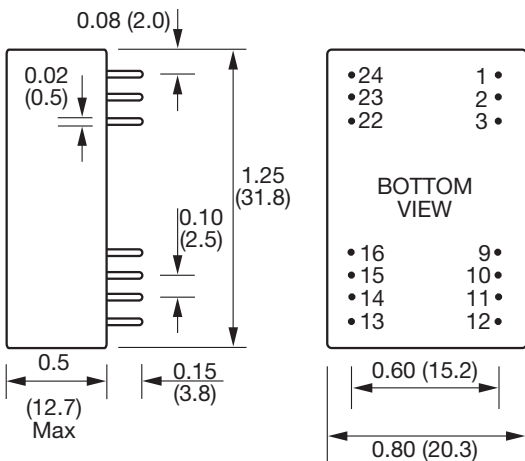
Notes

- Nominal input voltage 12, 24 or 48 VDC.
- For optional 4:1 input range: 9-36 VDC: Add suffix 'A' to WT2xx model number, 20-72 VDC: Add suffix 'A' to WT3xx model number.
- For 3000 VDC isolation add suffix 'X' to model number.
- For UL1950 approval, add suffix 'XU' to model number. UL approved product is only available with 3000 VDC isolation and option 'X' pinout.
- 'X' or 'XU' versions are not available with optional 4:1 input range.
- Input current is at nominal input voltage.

Mechanical Details

All dimensions are in inches (mm)

Weight: 0.06 lbs (25 g) approx.



PIN CONNECTIONS		
Pin	Single Output	Dual Output
1	+V input	+V input
2	N/C	-V output
3	N/C	Common
9	No pin	No pin
10	-V output	Common
11	+V output	+V output
12	-V input	-V input
13	-V input	-V input
14	+V output	+V output
15	-V output	Common
16	No pin	No pin
22	N/C	Common
23	N/C	-V output
24	+V input	+V input

OPTION 'X' / 'XU' PIN CONNECTIONS		
Pin	Single Output	Dual Output
1	No pin	No pin
2	-V input	-V input
3	-V input	-V input
9	N/C	Common
10	N/C	N/C
11	N/C	-V output
12	No pin	No pin
13	No pin	No pin
14	+V output	+V output
15	N/C	N/C
16	-V output	Common
22	+V input	+V input
23	+V input	+V input
24	No pin	No pin

Derating Curve

