



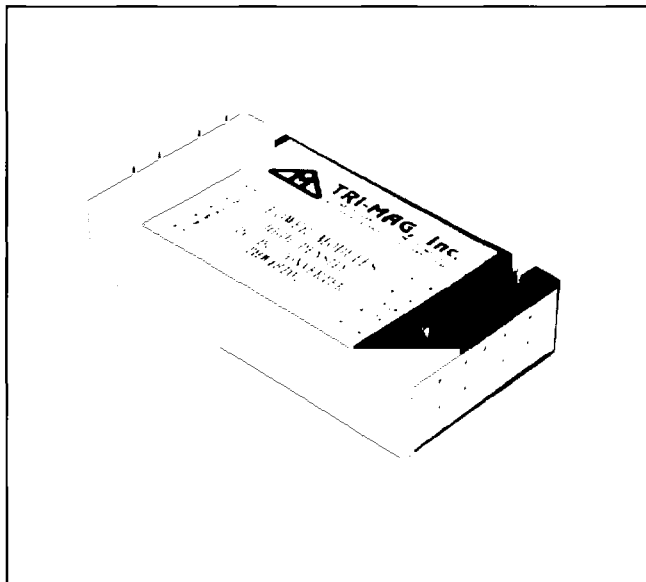
**HIGH DENSITY
 THW (2:1) & THX (4:1) SERIES
 60 Watts to 250 Watts
 DC-DC CONVERTER
 2:1 & 4:1 Wide Range Input**

FEATURES

- Remote Sense
- Current Limit
- Overvoltage Protection
- Thermal Shutdown
- Inhibit and load share (option)
- 20 to 70V wide Input Voltage Range DC/DC Converter (THX Series)
- PC Mountable
- High Stable Regulated Output
- Thermally Conductive Encapsulant
- 100% Burn-In And Triple Tested
- MTBF > 280,000 Hours Minimum

APPLICATIONS

- Computer & Local Area Network
- N + 1 Redundant Systems
- Telecommunications
- Industrial And Testing Equipment
- Battery-Powered Equipment
- Medical Equipment
- Distributed Power Systems



ELECTRICAL SPECIFICATIONS

Input Voltage Range	THW Series (2:1), THX Series (4:1)
Output Voltage Accuracy	±2%
Load Regulation	±0.5%
Line Regulation	±0.5%
Ripple & Noise (Pk - Pk, DC - 20MHz)	3% of nominal output voltage
Short Circuit Protection	Continuous < or = 25% of full load
Overvoltage Protection	115% to 140% of nominal output voltage
Transient Response	500 μS (micro second)
Thermal Shutdown	90° C and 105° C on base plate

GENERAL SPECIFICATIONS

Optional Inhibit (On/Off)	2mA sink & saturation voltage < 0.75V (Device)
Sharing in Parallel	Up to 4 module (within 1% output voltage accuracy)
Efficiency (at full load)	70% to 90%
Isolation Voltage	3750VAC
Operating Frequency	200 KHz Typical
Base Plate Operating Temperature	85° C Maximum and +100° C Maximum
Storage Temperature	-40° C to +100° C
Isolation Resistance	10 ⁹ Ohms, minimum
Reflected Ripple Current	20mA, typical
Weight	12.7 Oz. (358 grams)
Case Material	Non - conductive plastic with metal base



200 WATT: 2:1 WIDE RANGE INPUT, SINGLE OUTPUT

MODEL TYPE	INPUT VOLTAGE (VDC)	INPUT CURRENT A (TYP)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT A (MAX.)
THW1203S	10-20 (12)	7.6	3.3	18
THW1205S	10-20 (12)	7.7	5	12
THW1206S	10-20 (12)	8.5	6	11
THW1212S	10-20 (12)	7.7	12	5
THW1215S	10-20 (12)	7.7	15	4
THW1224S	10-20 (12)	9.2	24	3
THW1248S	10-20 (12)	8	48	1.3
THW2402S	20-36 (24)	5	2	25
THW2403S	20-36 (24)	5	3.3	25
THW2405S	20-36 (24)	7.7	5	25
THW2406S	20-36 (24)	7.4	6	20
THW2412S	20-36 (24)	8.1	12	11
THW2415S	20-36 (24)	8.3	15	9
THW2424S	20-36 (24)	8.1	24	5.5
THW2448S	20-36 (24)	8.8	48	3
THW4802S	40-65 (48)	3	2	30
THW4803S	40-65 (48)	3	3.3	30
THW4805S	40-65 (48)	4.5	5	30
THW4806S	40-65 (48)	4.5	6	25
THW4812S	40-65 (48)	5	12	14
THW4815S	40-65 (48)	4.9	15	11
THW4824S	40-65 (48)	5	24	7
THW4848S	40-65 (48)	5	48	3.5
THW2C02S	110-185 (155)	1.1	2	35
THW2C03S	110-185 (155)	1.1	3.3	35
THW2C05S	110-185 (155)	1.6	5	35
THW2C06S	110-185 (155)	1.6	6	30
THW2C12S	110-185 (155)	2	12	18
THW2C15S	110-185 (155)	2	15	15
THW2C24S	110-185 (155)	2	24	9
THW2C48S	110-185 (155)	2	48	4.5
THW3C02S	220-380 (300)	0.6	2	40
THW3C03S	220-380 (300)	0.6	3.3	40
THW3C05S	220-380 (300)	0.9	5	40
THW3C06S	220-380 (300)	1.0	6	35
THW3C12S	220-380 (300)	1.1	12	20
THW3C15S	220-380 (300)	1.1	15	16
THW3C24S	220-380 (300)	1.1	24	10
THW3C48S	220-380 (300)	1.1	48	5
THX4802S	20-70 (48)	1.8	2	30
THX4803S	20-70 (48)	3	3.3	30
THX4805S	20-70 (48)	3	5	20
THX4806S	20-70 (48)	3	6	16
THX4812S	20-70 (48)	3	12	8
THX4815S	20-70 (48)	3	15	6.5
THX4824S	20-70 (48)	3	24	4
THX4848S	20-70 (48)	3	48	2

- A. FOR OUTPUT CONFIGURATION OTHER THAN SHOWN ABOVE, PLEASE CONSULT THE MANUFACTURER.
- B. PROPER HEAT SINK IS REQUIRED FOR ALL MODELS.
- C. FT SCREW TERMINAL TYNE IS ALSO AVAILABLE
- D. FOR FRONT-END RECTIFIER AND POWER FACTOR CORRECTION PLEASE REFER TO SWITCHING POWER SUPPLY CATALOG TFE600 SERIES.

200 WATT: 2:1 WIDE RANGE INPUT, TRIPLE OUTPUT

MODEL TYPE	INPUT VOLTAGE (VDC) WIDE RANGE	INPUT CURRENT (VDC)	OUTPUT VOLTAGE / OUTPUT CURRENT (VDC/A) (MAX)		
			CH1	CH2	CH3
			THW12T01	10-20 (12)	7.7
THW12T02	10-20 (12)	7.7	5/10	15/2.5	15/2.5
THW24T01	20-36 (24)	7.7	5/20	12/3	12/3
THW24T02	20-36 (24)	7.7	5/20	15/2.5	15/2.5
THW48T01	40-65 (48)	4.5	5/20	12/4	12/4
THW48T02	40-65 (48)	4.5	5/20	15/3.5	15/3.5
THW2CT01	110-180 (155)	1.6	5/25	12/4	12/4
THW2CT02	110-180 (155)	1.6	5/25	15/3.5	15/3.5
THW3CT01	220-380 (300)	0.9	5/25	12/4	12/4
THW3CT02	220-380 (300)	0.9	5/25	15/3.5	15/3.5

200 WATT: 4:1 WIDE RANGE INPUT, SINGLE OUTPUT

MODEL TYPE	INPUT VOLTAGE (VDC)	OUTPUT VOLTAGE (VDC)	OUTPUT CURRENT A (MAX)
THX4802S	20-70 (48)	2	30
THX4803S	20-70 (48)	3.3	30
THX4805S	20-70 (48)	5	20
THX4806S	20-70 (48)	6	16
THX4812S	20-70 (48)	12	8
THX4815S	20-70 (48)	15	6.5
THX4824S	20-70 (48)	24	4
THX4848S	20-70 (48)	48	2

200 WATT: 4:1 WIDE RANGE INPUT, TRIPLE OUTPUT

MODEL TYPE	INPUT VOLTAGE (VDC) WIDE RANGE	INPUT CURRENT A (TYP)	OUTPUT VOLTAGE / OUTPUT CURRENT (VDC/A) (MAX)		
			CH1	CH2	CH3
			THX48T01	20-70 (48)	3
THX48T02	20-70 (48)	3	5/20	15/2.5	15/2.5

THW AND THX SERIES MAXIMUM OUTPUT CURRENT RATING

VOLTAGE (VOLT)	SINGLE OUTPUT							TRIPLE OUTPUT		
	3.3	5	6	12	15	24	48	CH1	CH2	CH3
IN	12	24/28	48	155	300					
OUT	18A	25A	30A	35A	40A	40A	40A	5A	4A	3.5A
	12A	25A	30A	35A	40A	40A	40A	10A	3A	2.5A
	5A	11A	14A	15A	16A	16A	16A	3A	4A	2.5A
	4A	7A	7A	9A	9A	9A	9A	20A	4A	3.5A
	3.5A	3.5A	3.5A	4.5A	4.5A	4.5A	4.5A	20A	4A	3.5A
	3.5A	3.5A	3.5A	4.5A	4.5A	4.5A	4.5A	25A	4A	3.5A
	3.5A	3.5A	3.5A	4.5A	4.5A	4.5A	4.5A	25A	4A	3.5A

Note:

- 1) The maximum current ratings are valid only if the base-plate temperature is held below 85° C or 100° C.
- 2) Triple output THW and THX Series modules require a channel 1 minimum load of 10 to 15% for maximum rated loading on channels 2 and/or channels 3.
- 3) Maximum output power is limited on THW Series triple output modules to 60, 125, 150, 175, and 200 watts respectively for the 12, 24, 48, 155, 300 Volt (nominal input voltage).
- 4) The maximum output power is limited on wide range THX Series modules to 100 watt.
- 5) Output surge current rating for 5 seconds on channel 2 of a triple output module is 8 Amps, assuming the module's total power rating isn't exceeded.

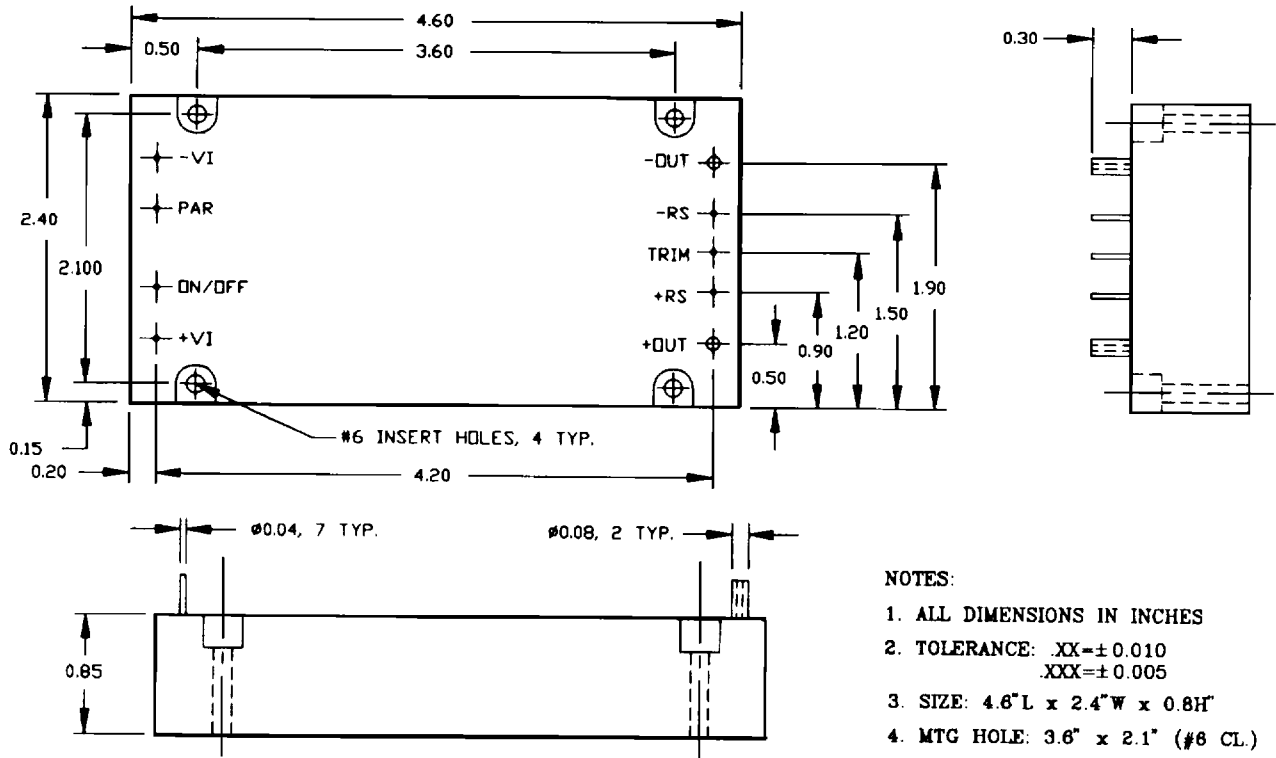
SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.



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your POWER Specialists

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1. SINGLE OUTPUT PACKAGE



2. TRIPLE OUTPUT PACKAGE

