

# TR-500

## LOW PROFILE -500 WATTS

ONE TO FOUR OUTPUTS - POWER FACTOR CORRECTED 90-264 VAC



### FEATURES:

- Low Profile 2.05" x 5" x 9.65" Size
- One to Four outputs
- All Outputs Independent (No Minimum Load Required)
- Meets EN55022 Level A / FCC Class A
- No Additional Cooling Required up to 50 °C
- Power Factor Corrected Input (90-264VAC)
- Active Current Share Capability
- Remote Sense On V1, V2 Outputs
- Greater than 150,000 Hrs MTBF



	OUTPUT VOLTAGE (VDC)	OUTPUT AMPERS (MAX)	OUTPUT POWER (WATTS)
V1	2 to 48	75	500
V2	10 to 24	8/12pk	100
V3	5 to 24	4**	60
V4	5 to 24	5	60

\* 600W Single output rated. Consult factory for details.

\*\*10 Amp Capable, Consult factory for details.

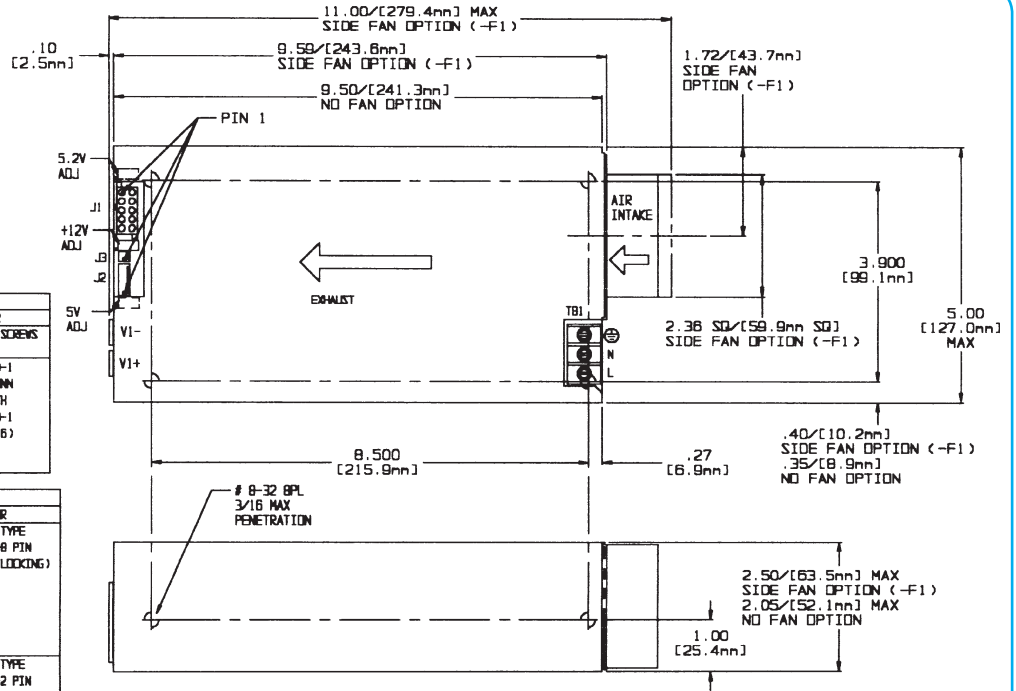
# TR-500 SERIES 500 WATT COMPACT SIZE

\* IN PDF FORMAT,  
PRINT OR ZOOM  
TO SEE DRAWING

AC INPUT (90-264 VAC CONTINUOUS RANGE)			
FUNCTION	115 VAC	230 VAC	CONNECTOR
TBI-<L>	LINE	LINE 1	BARRIER STRIP
TBI-<N>	NEUTRAL	LINE 2	#8-32 SCREWS
TBI-<GND>	SAFETY GROUND	SAFETY GROUND	3/8 CENTERS

DC OUTPUTS			
FUNCTION	DESCRIPTION	LOCATION	CONNECTOR
OUTPUT#1	+5V/75A	MAIN OUTPUT +V & -V	BUS BARS #8-32 SCREWS
OUTPUT#2	+12V/8A 12Apk RTN (COMMON)	J1-5, 10 J1-4, 9	AMP #770743-1 MATES WITH CONN #770580-1 WITH SOCKETS #171638-1 (ANG #20 TO #16)
OUTPUT#3	-12V/4A	J1-3, 8	
OUTPUT#4	+5.2V/5A	J1-2, 7 (+) FLOATING OUTPUT	
	-5.2V/5A	J1-1, 6 (-) FLOATING OUTPUT	

STATUS AND CONTROL			
FUNCTION	LOCATION	NOTES	CONNECTOR
REMOTE SENSE	J2-2	OUTPUT #1 SENSE	AMP MTA TYPE
	J2-1	OUTPUT #1 SENSE RTN	#640456-8 PIN
	J2-8	OUTPUT #2 SENSE	HEADER (LOCKING)
	J2-7	OUTPUT #2 SENSE RTN	
DC POWER GOOD	J2-3	REFERENCE TO COMMON	
AC POWER FAIL	J2-4		
INHIBIT	J2-5		
CURRENT SHARE	J2-6		
AUX FAN VOLTAGE (NOT AVAILABLE WITH -F1 OPTION)	J3-1	+12V @ 0.5A OUTPUT RTN (COMMON)	AMP MTA TYPE #640456-2 PIN HEADER (LOCKING)



<b>Nominal Input Voltage</b>	115-240 VAC.	<b>Reverse Voltage</b>	Protected against reverse voltage to supply current rating.
<b>Frequency</b>	47-63 Hz , 400Hz. available.	<b>Overvoltage Protection</b>	Shutdown at 130% of nominal Vout (V1-V3). V4 failsafe design. Recycle input power to reset.
<b>Operational Input Voltage Range</b>	90-264 VAC Power Factor 0.99 Typical at Full Load. Meets EN 61000-3-2.	<b>Overtemperature Protection</b>	Unit shuts down if overheated. AC must be recycled.
<b>Inrush Current</b>	Less than 4 msec. 30 amperes @ 115 VAC or 60 amperes @ 230 VAC.	<b>Cooling</b>	-F1 models equipped with Integral fan, up to 50°C Ambient full power. Models without -F1 fans, user provides min. 30 CFM.
<b>Brownout Protection:</b>	Holds Regulation to 85 Vac.	<b>Input/Output Isolation</b>	4242 VDC, SELV construction.
<b>Fusing</b>	10 Ampere, 250 VAC, Internal ceramic body fuse.	<b>Remote Sense (V1, V2 outputs)</b>	Up to 0.5 volts total in load. Open Sense Lead Protection
<b>Hold up time</b>	20msec minimum after loss of AC Input at full load and nominal input	<b>Remote On/Off</b>	Open to Run, Contact closure to return , turns off all outputs.
<b>Efficiency</b>	75% typical	<b>Power Fail</b>	Provides TTL "0" 5ms before output voltage goes out of regulation band upon loss of AC power.
<b>Turn on time</b>	Less than 1 sec.	<b>DC Power Good</b>	Provides TTL "1" open collector when output #1 is above 4.6V (for 5V nominal output).
<b>Line and Load Regulation</b>	All outputs hold 1% over AC input range and 0 to 100% load. No minimum load required on any output.	<b>Operating Temperature</b>	-20°C to 50°C full output.
<b>Adjustability</b>	Outputs #1 and #2 adjustable ± 5% minimum. Output #3 fixed. Output #4 adjustable ± 5% minimum or +5% only if voltage is 5.2V.	<b>Stability</b>	All outputs 0.1% for 8 hrs. after 30 minute warm-up.
<b>Ripple &amp; Noise</b>	1% PARD or 100mv which ever is greater. 20MHz bandwidth.	<b>Humidity</b>	Up to 95% non-condensing.
<b>Transient Response</b>	Output maximum excursion of ± 5% for 50% load step. Recovery less than 500 µsec.	<b>Size</b>	2.05"x 5"x 9.65" <b>Weight:</b> 6 lbs.
<b>Short Circuit and Overload Protection</b>	All outputs are protected from short circuit and overload. Automatic recovery.	<b>EMI</b>	Meets FCC Class A and EN55022 Level A
<b>Overshoot</b>	No turn-on or turn-off overshoot.	<b>Safety</b>	UL 1950, CSA C22.2 No. 950, EN60950.
<b>Output Isolation</b>	Isolated from ground 50 Vdc.		
<b>Peak Output Current</b>	Peak current can be delivered for a maximum period of 30 seconds.		

SERIES BREAKDOWN: TR-500X1-P-(F1)  
where X1= S for Single output, D for Dual output, T for Triple output or Q for Quad output  
Leave off the -(F1) if the user will provide cooling.

REV: D