



**TECTROL**  
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Total Power Solutions®

# TC54S-1505

300W Triple Output Power Supply



The TC54S-1505 is a Triple output Switching Power Supply offering 300W of continuous output power. The supply is mechanically designed for hot-swap / blind-mate replacement with internal isolation devices for redundant operation. The supply delivers output voltages of 3.3 / 5 / 12 VDC, making these ideal power solutions for high-end networking and peripheral applications.

## FEATURES

- 300 Watts with Triple Outputs
- Hot-Swap / N+1 Redundant Operation
- Universal AC Input with Active PFC
- High Quality / Rugged Design
- HALT Tested
- Full Featured Status & Control Signals
- Front Panel Switch & LED Indicator
- International Safety Approvals
- RoHS Compliant

## SAFETY STANDARDS

- UL60950-1
- CSA 22.2 # 60950
- BSMI
- CE Mark (LVD)

## EMISSION STANDARDS

- EN55022 Class A
- FCC 15 Sub Part J, Class A

Voltage	3.3V	5.0V	+12V	5VSB
Min Load	0.5A	2.0A	0.5A	-
Max Load	22A	30A	11A	1.5A
Ripple	50mV	50mV	150mV	100mV

Specification is subject to change without notice.

REV 091008-2

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**INPUT SPECIFICATION**

Full Range Input	90 to 264 Vrms, 50/60 Hz
AC Line Input	4.3A @ 115V & 2.1A @ 230 V input
Line Inrush Current	30A @ 115 VAC 60 Hz; 60A @ 230 VAC 50 Hz; half cycle, cold start (25°C)
Power Factor	> 0.90 (typically 0.98 @ 220 VAC)
Harmonic Compliance	EN61000-3-2 Class A Limits
Leakage Current	2.0mAmps per module
Voltage Dip/Interruptions	Complies with IEC/EN 61000-4-11
Transients & Surges	Complies with IEC/EN 61000-4-5
Efficiency	68% minimum @ full load, 115VAC nominal line

**OUTPUT SPECIFICATION**

Factory Set Output Voltage	±1% or 0.05V, whichever is greater (max)
Regulation	±5% max (line, load, temperature)
Ripple	100mV pk-pk max
Maximum Power	3.3V & 5V outputs not to exceed 160W combined Total Module Power not to exceed 300W
Parallel Operation	Parallel redundant or N+1
Hot Swap Capability	Fully hot swappable, blind mate connector
Transient Response	3% max deviation from nominal set voltage, for 25~100% step load change. Recovery to within 1% within 1ms.

**STATUS & CONTROL**

Current Share	±10% accuracy
Remote Enable	An "active low" to "enable" main outputs
Remote Sense	All Outputs
Power Good	Open collector, active "high" =Good
5Vsb	1.5 Amp (max)
LED Indicator:	Green LED indicates OK, LED extinguishes for fault condition

**PROTECTION**

Overload Protection	120~135% of I <sub>max</sub> , Auto-Recovery Consult Factory for unique set-point
Over Voltage Protection	120~150% shutdown, recycle input to rest
Over Temperature Protection	Shut down in the event of operation in excessive temperature or blocked/failed airflow (self recovery)

**ENVIRONMENTAL**

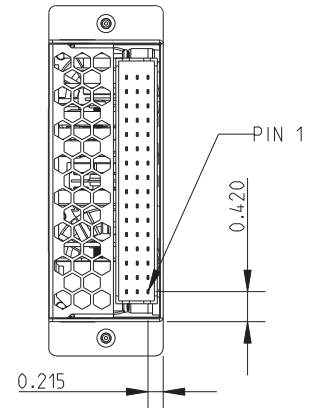
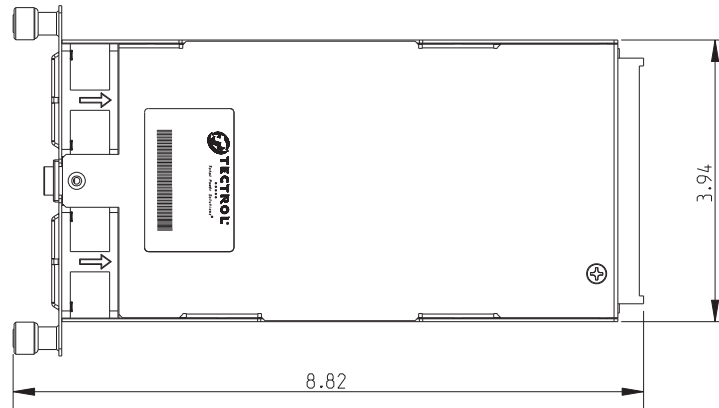
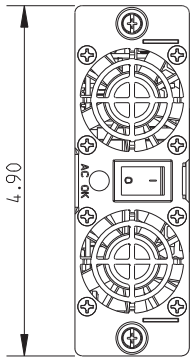
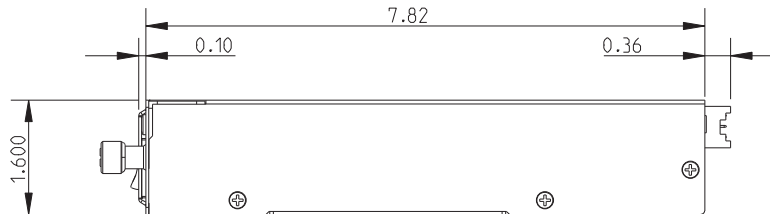
Temperature Range	-10° to 50° C, Full Load, no derating
Storage Temperature	-20° to 60° C
Cooling / Air Flow	Integral dual high performance 40 mm fans. Airflow direction; inlet at fan face; exhaust at connector face.
Reliability	Telecordia SR332; >400Khrs; 40°C; Full Load

**SAFETY / EMISSIONS**

Safety Approvals	UL60950-1 CSA 22.2 # 60950 BSMI CE Mark (LVD)
Emissions	FCC 15 Sub Part J, Class A EN55022 Class A

**MECHANICAL FORMAT**

Input/Output Connector	Harting 0901486901 Tyco / Amp - 2164045-4
Mechanical Outline	7.82" x 3.94" x 1.60" 198.6 x 100.0 x 40.1mm



Row/Pin	Function	Row/Pin	Function	Row/Pin	Function	Row/Pin	Function	Row/Pin	Function
Z1	Neutral	B1	Neutral	D1	Neutral	Z9	Common	B9	V1 +3.3V Sense
Z2	Line	B2	Line	D2	Line	Z10	+12V IShare	B10	V3 +12V Sense
Z3	Protective Earth	B3	Protective Earth	D3	Protective Earth	Z11	V2 +5V Sense	B11	Reserved
Z4	V1 +3.30VDC	B4	V1 +3.30VDC	D4	V1 +3.30VDC	Z12	Common	B12	Common
Z5	V1 +3.30VDC	B5	V1 +3.30VDC	D5	V1 +3.30VDC	Z13	Common	B13	Common
Z6	Common	B6	Common	D6	Common	Z14	V2 +5.0VDC	B14	V2 +5.0VDC
Z7	Remote Enable	B7	Power Good	D7	V4 5VSTANDBY	Z15	V2 +5.0VDC	B15	V2 +5.0VDC
Z8	V3 +12VDC	B8	V3 +12VDC	D8	V3 +12VDC	Z16	Common	B16	Common
								D9	V1 +3.3V Share
								D10	Reserved
								D11	V1 +5V Share
								D12	Common
								D13	Common
								D14	V2 +5.0VDC
								D15	V2 +5.0VDC
								D16	Common

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