CD TECHNOLOGIES
Power Solutions

**Corporate: www.cdtechno.com**
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# TX1000

## 1000 Watt, Single Output, AC/DC Power Supply



- Harmonic Correction to EN61000-3-2
- Wide Range Input of 90-264VAC
- FCC / CISPR 22 Class A EMI Filtering
- Typical Power Factor of 0.99
- Active Current Sharing
- Self-Cooled 5"x 4.88"x 12" Chassis
- 70-80% Efficiency
- Optional ORing Diode
- UL/CUL 1950, VDE EN60950
- CE Marked
- EN61000-4 Immunity

**OBSOLETE PRODUCT**
Contact Factory for Replacement Model

The TX1000 Series of single output 1kW power supplies are fully featured for usage worldwide. With active Power Factor Correction (PFC) to EN61000-3-2, wide-range input of 90-264VAC, EMI compliance to FCC and CISPR 22, "CE" Mark, and immunity to EN61000-4, the TX1000 series is ready for global deployment. Standard features include remote sense compensation, output voltage adjustment, active current sharing, remote inhibit, power fail warning, DC OK signal, and thermal shutdown. A complete array of output voltages from 2.5 to 48VDC is available. The self-cooled 5" x 4.88" x 12" chassis provides industry-standard modularity that permits optimum flexibility in installation. An optional ORing diode is offered on all models greater than 5VDC models.

## PRODUCT SELECTION CHART

| MODEL | OUTPUT VOLTAGE | OUTPUT CURRENT |
|---|---|---|
| TX10005AASLPLNH | 5.0 | 200A |
| TX10005BASLPLNH(1) | 12.0 | 84A |
| TX10005CASLPLNH(1) | 15.0 | 67A |
| TX10005DASLPLNH(1) | 18.0 | 56A |
| TX10005EASLPLNH(1) | 24.0 | 42A |
| TX10005FASLPLNH(1) | 28.0 | 36A |
| TX10005GASLPLNH(1) | 36.0 | 28A |
| TX10005HASLPLNH(1) | 48.0 | 21A |
| TX10005JASLPLNH(1) | 20.0 | 50A |
| TXD10005KASLPLNH(1) | 3.3 | 182A |
| TXD10005LASLPLNH(1) | 2.5 | 200A |

**Notes:** (1) Model specified without optional ORing diode; to specify the diode option, replace the letter "N" with the letter "D", no O-Ring diode on 5V models.

## INPUT SPECIFICATIONS

| PARAMETERS | CONDITIONS | MIN | TYP | MAX | UNITS |
|---|---|---|---|---|---|
| Operating Range | 47-63Hz | 90 | | 264 | VAC |
| Input Current | Nominal line, full load | | | 12 | A |
| Inrush Current | 120VAC, 25°C, cold start | | | 80 | Apk |
| | 240VAC, 25°C, cold start | | | 160 | Apk |
| Efficiency | Nominal line, full load | 70 | 75 | 80 | % |
| Holdup | Full load | 20 | | | msec |
| Power Factor (1) | Full load | | 0.99 | | |

**Notes:** (1) Harmonic currents meet EN61000-3-2

## OUTPUT SPECIFICATIONS

| PARAMETERS | CONDITIONS | MIN | TYP | MAX | UNITS |
|---|---|---|---|---|---|
| Output Power | All environmental and line conditions | | | 1000 | Watts |
| Voltage Adjustment Range | Relative to nominal output voltage | | ±5 | | % |
| Output Regulation | Line and load (each) | | | ±0.2 | % |
| Minimum Load | | 0 | | | Amps |
| PARD | Measured at output terminals, 20MHz | | | 1 | % pk-pk |
| Temperature Coefficient | 0° to 50°C | | ±0.2 | | %/°C |

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## ENVIRONMENTAL SPECIFICATIONS

| PARAMETERS | CONDITIONS | MIN | TYP | MAX | UNITS |
|---|---|---|---|---|---|
| Ambient Temperature (Operating) | Output de-rated linearly to 50% of rated capacity between 50°C and 70°C | 0 | | +70 | °C |
| Ambient Temperature | Non-operating | -50 | | +85 | °C |
| Altitude (Operating) | | -200 | | +10,000 | Feet |
| Altitude (Non-operating) | | -200 | | +50,000 | Feet |
| Shock | Per MIL-STD-810D, Method 516.3, Procedure II, in each axis, including NTSA drop test | | | | |
| Vibration | Per MIL-STD-810D, Method 514.3, Procedure II, in each axis, including NTSA drop test | | | | |
| Cooling | The TX1000 is provided with an internal cooling fan. | | | | |

## PRODUCT FEATURES

| FEATURES | CHARACTERISTIC |
|---|---|
| Remote Sense | 500mV compensation |
| Active Current Sharing | Single Wire; 5% tolerance if outputs are over 25% of rated load |
| ORing Diode | Optional on all models (not available on 5V model) |
| OVP | 125% of nominal (±7.5%) |
| Thermal Shutdown | Automatic Restart |
| DC OK Signal | Logic "1" when output is within ±3% of nominal |
| Power Fail Warning Signal | Transition to Logic "0" at least 5msec before loss of output regulation |
| Remote Inhibit | Logic "0" applied will inhibit output (referenced to –Sense terminal) |

## PRODUCT COMPLIANCES

| APPROVAL | CHARACTERISTIC |
|---|---|
| UL and cUL | UL1950, 3rd Edition (1) |
| VDE | EN60950 |
| FCC | Class A requirements for conducted emissions |
| CISPR 22 | Class A requirements for conducted emissions |
| EN61000-3-2 | Harmonic Currents, Class A |
| EN61000-4-2 | Electrostatic Discharge, Level 4 |
| EN61000-4-3 | Radiated Immunity, Level 2 |
| EN61000-4-4 | Electrical Fast Transients, Level 3 |
| EN61000-4-5 | Input Surge Immunity, Level 3 |
| EN61000-4-6 | Conducted Immunity, Level 4 |
| EN61000-4-8 | Magnetic Field Immunity, Level 2 |
| CE Mark | Low Voltage Directive |

**Notes:** (1) UL1950, 3rd Edition incorporates the requirements of CSA 22.2

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## ORDERING INFORMATION

### MODEL DESIGNATION

**BASE MODEL** TX1000

Chassis: "5" = 5" x 4.88" x 12"; "M" = modified

Output Voltage: See Chart below

Input Filter: "A" designates Class A EMI filter

Fan: "S" designates Standard Fan

Remote Inhibit: "L" designates that Logic "0" applied inhibits output

"P" designates Active Input Power Factor Correction with widerange input voltage of 90-264 VAC

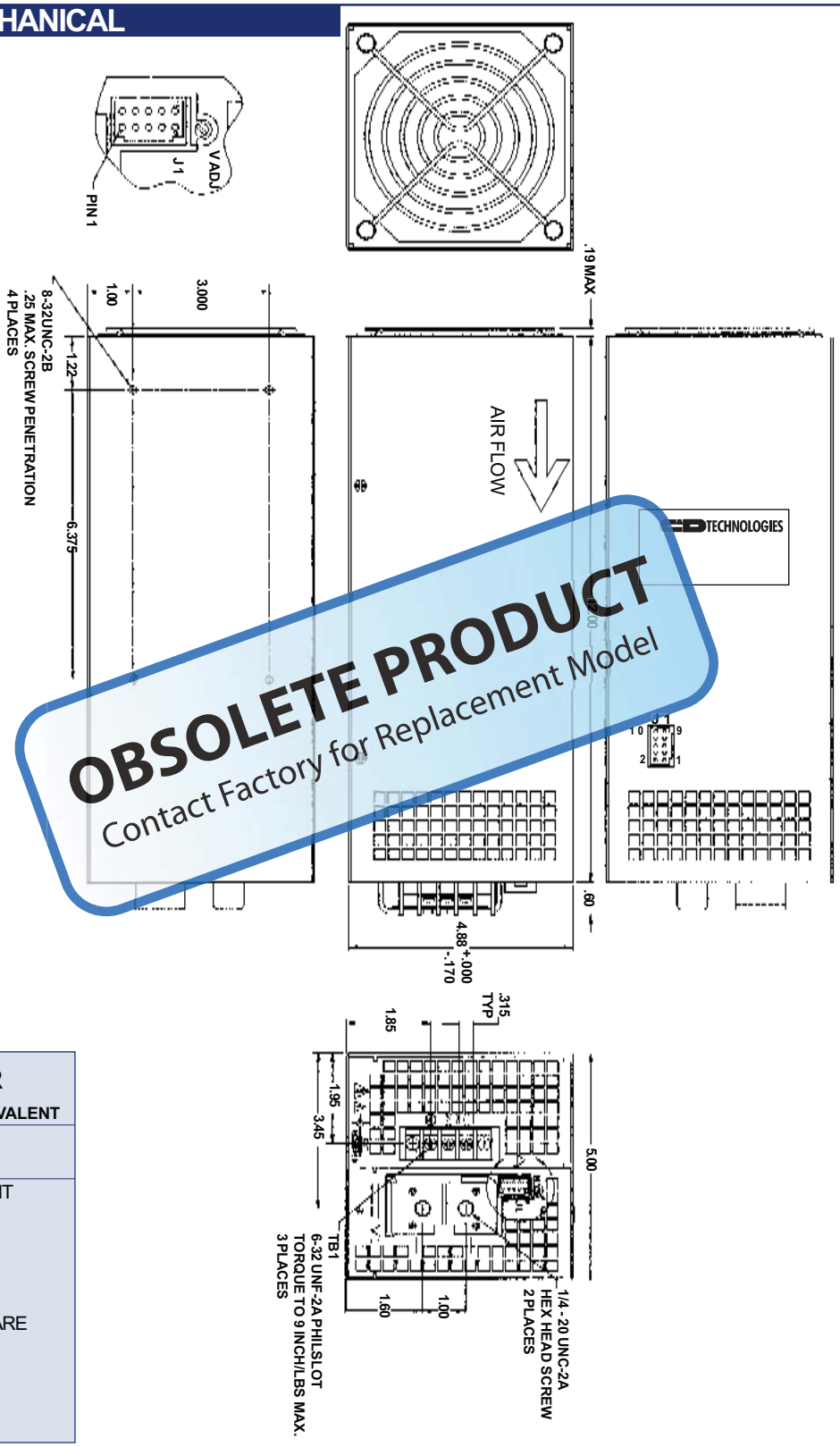
Power Fail Warning: "L" designates transition to Logic "0" upon loss of AC

Output ORing diode: "N" = None; "D" = Diode Option

DC OK: "H" designates that Logic "1" indicates a DC OK condition

| OUTPUT VOLTAGES | |
|---|---|
| A = 5V | G = 36V |
| B = 12V | H = 48V |
| C = 15V | J = 20V |
| D = 18V | K = 3.3V |
| E = 24V | L = 2.5V |
| F = 28V | |

# MECHANICAL




## J1 CONNECTOR

**AMP NO. 87579-2 OR EQUIVALENT**

| PIN NO. | FUNCTION |
|---|---|
| 1 | REMOTE INHIBIT |
| 2 | DC OK |
| 3 | N/C |
| 4 | N/C |
| 5 | POWER FAIL |
| 6 | CURRENT SHARE |
| 7 | + SENSE |
| 8 | N/C |
| 9 | – SENSE |
| 10 | N/C |


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