



Model TC2K2

**DE
offers**



**1U high
2.40kW Telecom
DC Power Source**

**DE Power introduced
its TC2K2 48V DC high-
density, 1U high
switching power supply
with PFC for
telecommunications
and distributed power
markets.**

***TC2K2 also offers
optional AC output
plug-in for 230V AC/
400VA***

Model TC2K2 designed to operate directly from a wide range of commercial line power, the new **DE 1U high 2.40kW Telecom Power Supply Model TC2K2** supports a wide input voltage range from 90 to 270V AC at 45 to 70Hz. It can deliver 2400W of continuous DC power with temp-controlled forced air cooling at 48V DC and settable from 40V to 60V DC.

TC2K2 DC power supply features a 1U high standard 19" rack package - identical DC source to facilitate a drop-in alternative for OEMs and offers a low-profile application needs of Industry. **TC2K2** uses optimized airflow enabling maximum thermal performance.

Hot Plug-in Modules: Additional standard feature includes modular construction with hot-plug-in modules, integrated control and full monitoring capabilities. Each plug-in module of 1/3 rack width provides DC output of 800W. **TC2K2** achieves best-in-class levels of reliability by utilizing an extensive set of conservative rating criteria throughout the product development process. DE Power's comprehensive qualification program ensures that the product will reliably meet the demands of a

wide range of high-availability applications where power continuity is a top priority. The power supply is also fully protected against over-current, over-voltage and over-temperature conditions. **AC Output Module:** **TC2K2** has a unique optional offer to replace one DC output module with the DE "AC Output Module" that delivers 230V sine wave AC voltage with 500VA output capacity.

TC2K2 complies with all standard environmental expectations including shock, vibration, humidity and thermal performance. In addition, the power supply is designed to meet all major safety and performance standards (UL, CSA and VDE) and is CE marked according to LVD directives. **TC2K2** meets EN55022 class B conducted EMI limits when properly grounded. The **TC2K2** will be available from July 2009, with a standard lead time of stock to eight weeks.



Specifications for the low profile switch mode rectifier

SYSTEM SPECIFICATIONS

INPUT

Voltage: 90-264V AC, 47-63Hz, single phase
Power Factor: 0.99 typical at full load/nominal line input
Efficiency: 88% typical
No Load Current: <100mA @ 230V AC

OUTPUT

Voltage	Voltage Settability	Current
24V DC	(23-28V DC)	85A
36V DC	(34-42V DC)	60A
48V DC	(43-56V DC)	45A
60V DC	(54-70V DC)	36A
120V DC	(100-130V DC)	21A
220V DC	(200-250V DC)	10A

Ripple: 200mV p-p
Regulation: Line/load: $\pm 2\%$, + a diode drop
Output Characteristics: CV, CC
Recovery Time: 1mS typical
Protections: Output over voltage, over-temperature, short circuit
Redundant operation: Possible with built in diode
Parallel Operation: Auto current sharing, with built in diode.
Series operation: Possible with diode across the output.
Safety & EMI/ EMC: EN60950-1
 EN55022 Class - B

GENERAL DATA

Operational Temperature: 0 to 40°C
Storage Temperature: -10 to 70°C
Humidity: 95% without condensation.
Power ON/OFF Switch: Rocker switch for the input power ON/OFF.
Cooling: Forced cooled
Termination: Brass terminals/bus bar for output
 Feller socket for the input.
Mechanical Dimensions: 19" x 1U high x 500mm (3 modules in one rack size)
Weight: 10Kg approx.

MODULE SPECIFICATION

INPUT

Voltage: 380V DC $\pm 15\%$ DC
No Load Current: 300mA max.
Efficiency: 93% typical.

OUTPUT

1/3 19" rack module specifications

Voltage	Voltage Settability	Current
24V DC	(23-28V DC)	28A
36V DC	(34-42V DC)	20A
48V DC	(43-56V DC)	15A
60V DC	(54-70V DC)	12A
120V DC	(100-130V DC)	7A
220V DC	(200-250V DC)	3.5A

Ripple: 200mV p-p
Regulation: Line/load: $\pm 2\%$, + a diode drop

Output Characteristics: CV, CC

Recovery Time: 1mS typical

Protections: Output over voltage, over-temperature, short circuit electronic shut- down, reset by push button switch

HOT SWAP

Redundant operation: Possible with built in diode
Parallel Operation: Auto current sharing, with built in diode.
Series Operation: Possible with diode across the output.

CONTROLS & INDICATOR

Output Voltage: Screwdriver set potentiometer
Output ON: Green LED indication
Fault Alarm: Red LED for the abnormal fault indication.

GENERAL DATA

Operational Temperature: 0 to 40°C
Storage Temperature: -10 to 70°C
Humidity: 95% without condensation.
Cooling: Forced cooled
Termination: DIN41612 connector for input & output connections.
Mechanical Dimensions: 135W x 1U high x 275 (mm) (3 modules in one rack size)
Weight: 1.8Kg approx.

OPTIONAL INVERTER MODULE SPECIFICATIONS

INPUT

Voltage (Nominal): 48V DC
Low Battery: 43.2V
High Battery: 57.6V
No Load Current: 0.3A
Efficiency: 85% typical.

AC OUTPUT

Continuous Output Power: 500VA
Surge Output: 750VA
Voltage: 230V AC $\pm 2\%$.
Frequency: 50Hz.
Waveform: Pure sine wave.
Line/ Load Regulation: 2%

CONTROLS & INDICATOR

Output ON: Green LED indication
Fault Alarm: Red LED for the abnormal fault indication.

PROTECTION

Thermal: Over temperature shut down
Output Shot Circuit: Yes.
Over Load: 120% of max. load.
Input voltage: Under voltage/over voltage shut down

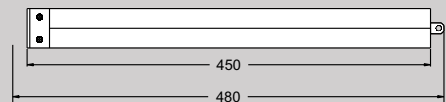
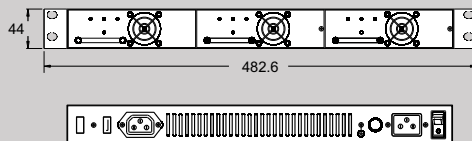
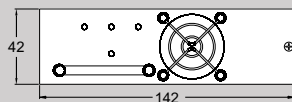
ISOLATION TEST

Input & Ground: 700V DC
Output & Ground: 2.1KV DC

GENERAL DATA

Operational Temperature: 0 to 40°C
Storage Temperature: -10 to 70°C
Humidity: 95% without condensation.
Cooling: Forced cooled
Termination: DIN41612 connector for Input & output connections.
Mechanical Dimensions: 135W x 1U high x 275 (mm) (3 Modules in one rack size)
Weight: 1.8Kg approx.

Specification subject to change without notice.



Dimensions in mm



POWER CONTROLS & CONVERSION DIVISION

Deodhar Electro Design (P) Ltd., 81, SDF-III, SEEPZ-SEZ, Andheri East, MUMBAI 400096. T: + 91 22 28290059, 28292055
 F: + 91 22 28290470 E: info@dedl.co.in www.dedl.co.in