



Unit 14, The Bridge Business Centre  
 Dunston Road, Chesterfield, S41 9FG  
 T e l : + 44 (0) 1246 452909  
 F a x : + 44 (0) 1246 452942  
 W e b : w w w . e t p s . c o . u k  
 E m a i l : s a l e s @ e t p s . c o . u k  
 S a l e s : 0 8 0 0 6 1 2 9 5 7 5

# REC-SMPS

# AC-DC Converter

## Description

The REC-SMPS range of switch-mode power supplies provides both single and multi output units (see separate data sheet REC-SMPS-M) with maximum output powers of 40watts to 2000 watts. The range switches at 100 kHz and achieves efficiencies of 88%. This high efficiency translates into a very compact package and a lower level of input energy to power your application. The units incorporate a passive power factor correction circuit and all components are derated to provide long term reliability and trouble free use. All units in the series are fully enclosed and have mounting options on either the base or side of the case. The output characteristics are CC /CV and with over temperature, overload protection elevated operating temperature (70 °C) and a conformal protection option ensures that these power supplies are suitable for a wide range of applications. The power platforms in this range can also be modified and have formed the base of many customer specific requirements from industrial control and fire alarm systems to automotive test rigs and off shore projects.



- Overload & over temperature protection
- Other O/P voltages on request
- CC & CV operating modes
- High efficiency, up to 88%
- Rugged design
- PFC circuit

## Technical Data

AC Input (40W/250W/350W/500W/750W/1kW).....	90 - 264VAC, 47 - 63Hz
AC Input (75W/150W/250W).....	115/230Vac, 47-63Hz (90-264Vac option for 75 & 150W)
Safety.....	EN 60950
Creeping and clearance.....	8/8
Emission.....	EN 61000-6-4
Immunity.....	EN 61000-6-2
Protection class.....	1
Operating temperature.....	0 - 70 °C
Temperature coefficient.....	0.02%/ °C
Storage temperature.....	-45 to 85 °C
Derating from 55 °C.....	-2.5%/ °C
MTBF MIL Handbook.....	120,000h
Load regulation.....	0.2% (10-90-10% Load)
Input regulation.....	0.1% (±15%)
Response time.....	800µsec (20-100/100-20%)
Ripple & noise.....	0.2% / 1% (rms/pp)



sales@etps.co.uk  
0800 612 95 75

## Selection Table

Part Number	Power	Voltage	Current	Dimensions	Weight
REC-SMPS 40-5	40W	5V	8A	130 x 64 x 28mm	1.1kgs
REC-SMPS 40-12	40W	12 - 15V	3.5A	130 x 64 x 28mm	1.1kgs
REC-SMPS 40-24	40W	24 - 28V	2A	130 x 64 x 28mm	1.1kgs
REC-SMPS 40-48	40W	48 - 60V	1.2A	130 x 64 x 28mm	1.1kgs
REC-SMPS 75-5	75W	5V	15A	140 x 100 x 42mm	1.2kgs
REC-SMPS 75-12	75W	12 - 15V	5A	140 x 100 x 42mm	1.2kgs
REC-SMPS 75-24	75W	24 - 28V	3A	140 x 100 x 42mm	1.2kgs
REC-SMPS 75-48	75W	48 - 60V	1.5A	140 x 100 x 42mm	1.2kgs
REC-SMPS 150-5	150W	5V	30A	200 x 100 x 42mm	1.5kgs
REC-SMPS 150-12	150W	12 - 15V	12A	200 x 100 x 42mm	1.5kgs
REC-SMPS 150-24	150W	24 - 28V	5A	200 x 100 x 42mm	1.5kgs
REC-SMPS 150-48	150W	48 - 60V	3.3A	200 x 100 x 42mm	1.5kgs
REC-SMPS 250-5	250W	5V	50A	225 x 127 x 48mm	2.1kgs
REC-SMPS 250-12	250W	12 - 15V	20A	225 x 127 x 48mm	2.1kgs
REC-SMPS 250-24	250W	24 - 28V	12A	225 x 127 x 48mm	2.1kgs
REC-SMPS 250-48	250W	48 - 60V	6A	225 x 127 x 48mm	2.1kgs
REC-SMPS 350-5	350W	5V	60A	225 x 127 x 48mm	2.4kgs
REC-SMPS 350-12	350W	12 - 15V	25A	225 x 127 x 48mm	2.4kgs
REC-SMPS 350-24	350W	24 - 28V	15A	225 x 127 x 48mm	2.4kgs
REC-SMPS 350-48	350W	48 - 60V	7.5A	225 x 127 x 48mm	2.4kgs
REC-SMPS 500-12	500W	12 - 15 V	33A	227 x 127 x 63mm	2.9kgs
REC-SMPS 500-24	500W	24 - 28V	19A	227 x 127 x 63mm	2.9kgs
REC-SMPS 500-48	500W	48 - 60V	9A	227 x 127 x 63mm	2.9kgs
REC-SMPS 500-90	500W	90 - 110V	5A	227 x 127 x 63mm	2.9kgs
REC-SMPS 500-125	500W	125 - 150V	3.5A	227 x 127 x 63mm	2.9kgs
REC-SMPS 750-12	750W	12 - 15 V	50A	227 x 127 x 63mm	2.9kgs
REC-SMPS 750-24	750W	24 - 28V	30A	227 x 127 x 63mm	2.9kgs
REC-SMPS 750-48	750W	48 - 60V	15A	227 x 127 x 63mm	2.9kgs
REC-SMPS 750-90	750W	90 - 110V	7A	227 x 127 x 63mm	2.9kgs
REC-SMPS 750-125	750W	125 - 150V	5A	227 x 127 x 63mm	2.9kgs
REC-SMPS 1000-12	1000W	12 - 15 V	80A	330 x 126 x 130mm	5.5kgs
REC-SMPS 1000-24	1000W	24 - 28V	40A	330 x 126 x 130mm	5.5kgs
REC-SMPS 1000-48	1000W	48 - 60V	20A	330 x 126 x 130mm	5.5kgs
REC-SMPS 2000-12	2000W	12 - 15 V	160A	330 x 126 x 130mm	6.5kgs
REC-SMPS 2000-24	2000W	24 - 28V	80A	330 x 126 x 130mm	6.5kgs
REC-SMPS 2000-48	2000W	48 - 60V	40A	330 x 126 x 130mm	6.5kgs

Different output ranges and application/user specific options are possible. Please contact ET to discuss your requirements.

## Options Table

Code	Description
/AI-5CC.....	0-5V = 0 to I <sub>max</sub>
/AI-5CV.....	0-5V = 5V to V <sub>max</sub> (for 5V units range is 2V to V <sub>max</sub> )
/AI-5CC/CV.....	0-5V = 0 to I <sub>max</sub> , 5V to V <sub>max</sub> (for 5V units range 0 to I <sub>max</sub> and 2V to V <sub>max</sub> )
/AI-10CC.....	0-10V = 0 to I <sub>max</sub>
/AI-10CV.....	0-10V = 5V to V <sub>max</sub> (for 5V units range is 2V to V <sub>max</sub> )
/AI-10CC/CV.....	0-10V = 0 to I <sub>max</sub> , 5V to V <sub>max</sub> (for 5V units range 0 to I <sub>max</sub> and 2V to V <sub>max</sub> )
/LT.....	-20° to +70 °C temperature range
/LT40.....	-40° to +70 °C temperature range
/PF.....	AC Power Fail Signal TTL or Open Collector (not available on 40W units)
/L3.....	DC Output Power Fail Signal (not available on 40W units)
/CC.....	Conformal Coating
/IEC.....	IEC Inlet fitted (500W to 2000W only)
/N+1.....	Blocking Diode fitted (500W to 2000W only)
/PS.....	Active Power Sharing input (500W to 2000W only)
/AS.....	Auto Select 90-264Vac for 75W & 150W units
/3P.....	3 phase input 3 x 400VAC 47-63Hz (2000W unit only)