



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-M

Multiple Output AC-DC Converter

Description

The REC-SMPS-M range of switchmode power supplies provide up to 4 outputs with a maximum power of 40 watts to 350 watts. If a single output is required please see the separate technical summary REC-SMPS which has models from 40W to 2kW. 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 these power supplies are suitable for a wide range of applications. Where remote adjustability of voltage and current limit is required an analogue interface can be specified. The power platforms in this range have formed the base of many customer specific requirements including: Industrial Control Systems, Fire Alarm Systems, Automotive Test, Laser Diode, driver, vacuum pump, off shore, rail and galvanic applications to name but a few. If your ideal ranges aren't covered by the standard versions then please contact ETPS for a solution to your needs.



- Overload & over temperature protection
- Adjustable V & I with analogue signal
- CC & CV operating modes
- High efficiency, up to 88%
- PFC circuit

Selection Table

Part Number	Power	Output 1		Output 2		Output 3		Output 4	
		V	A	V	A	V	A	V	A
REC-SMPS 40-M1	40W	5V	6A	12V	2A (3A)	-12V	0.7A	-5V	0.3A
REC-SMPS 40-M2	40W	5V	6A	12V	2A (3A)	-12V	0.3A	12V	0.3A
REC-SMPS 40-M3	40W	5V	6A	24V	1A (1.5A)	-12V	0.3A	12V	0.3A
REC-SMPS 75-M1	75W	5V	10A	12V	3.5A (5A)	-12V	1A	-5V	1A
REC-SMPS 75-M2	75W	5V	10A	12V	1.5A	-12V	1A	12V	3.5A (5A)
REC-SMPS 75-M3	75W	5V	10A	12V	1.5A	-12V	1A	24V	2A (3A)
REC-SMPS 150-M1	150W	5V	20A	12V	3A	-12V	1A	n/a	n/a
REC-SMPS 150-M2	150W	5V	15A	12V	6A (8A)	-12V	1A	5V	0.5A
REC-SMPS 150-M3	150W	5V	12A	12V	1.5A	-12V	1A	12V	6A (8A)
REC-SMPS 150-M4	150W	5V	12A	12V	1.5A	-12V	1A	24V	3A (4A)
REC-SMPS 250-M1	250W	5V	25A	12V	8A (10A)	12V	1A	5V	1A
REC-SMPS 250-M2	250W	5V	25A	12V	4A (6A)	12V	1A	12V	8A (10A)
REC-SMPS 250-M3	250W	5V	25A	12V	4A (6A)	12V	1A	24V	4A (6A)
REC-SMPS 350-M1	350W	5V	40A	12V	8A (10A)	12V	1A	5V	1A
REC-SMPS 350-M2	350W	5V	40A	12V	4A (6A)	12V	1A	12V	8A (10A)
REC-SMPS 350-M3	350W	5V	40A	12V	4A (6A)	12V	1A	24V	4A (6A)

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

() Max current in brackets is available according to Max Power



sales@etps.co.uk
0800 612 95 75

Technical Data

AC Input.....	90 - 264VAC, 47 - 63Hz
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 (option -40 to +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
Weight / Dimensions (40W units).....	1.1kgs / 130 x 64 x 28mm (LxWxH)
Weight / Dimensions (75W units).....	1.2kgs / 140 x 100 x 42mm (LxWxH)
Weight / Dimensions (150W units).....	1.5kgs / 200 x 100 x 42mm (LxWxH)
Weight / Dimensions (250W units).....	2.1kgs / 225 x 127 x 48mm (LxWxH)
Weight / Dimensions (350W units).....	2.4kgs / 225 x 127 x 48mm (LxWxH)

Output 1

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)
Output adjustable.....	±5%
Remote sense.....	+0.3V (typical)

Output 2

Load regulation (40W, 75W & 150W units).....	±4% (0-90-90% Load)
Load regulation (250W & 350W units).....	1% (10-90-10% Load)
Input regulation (40W, 75W & 150W units).....	0.2% (±15%)
Input regulation (250W & 350W units).....	0.1% (±15%)
Ripple & noise.....	0.2% / 1% (rms/pp)
Cross regulation (40W, 75W, 150W).....	1:10 (load change on main output)

Outputs 3 & 4

Load regulation (40W, 75W & 150W units).....	0.2% (10-90-10% Load)
Load regulation (250W & 350W units).....	1% (10-90-10% Load)
Input regulation.....	0.1% (±15%)
Ripple & noise.....	0.2% / 1% (rms/pp)

Options Table

Code	Description
/AI-5CC.....	0-5V = 0 to I _{max}
/AI-5CV.....	0-5V = 5V to V _{max} (for 5V units range is 2V to V _{max})
/AI-5CC/CV.....	0-5V = 0 to I _{max} , 5V to V _{max} (for 5V units range 0 to I _{max} and 2V to V _{max})
/AI-10CC.....	0-10V = 0 to I _{max}
/AI-10CV.....	0-10V = 5V to V _{max} (for 5V units range is 2V to V _{max})
/AI-10CC/CV.....	0-10V = 0 to I _{max} , 5V to V _{max} (for 5V units range 0 to I _{max} and 2V to V _{max})
/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)