

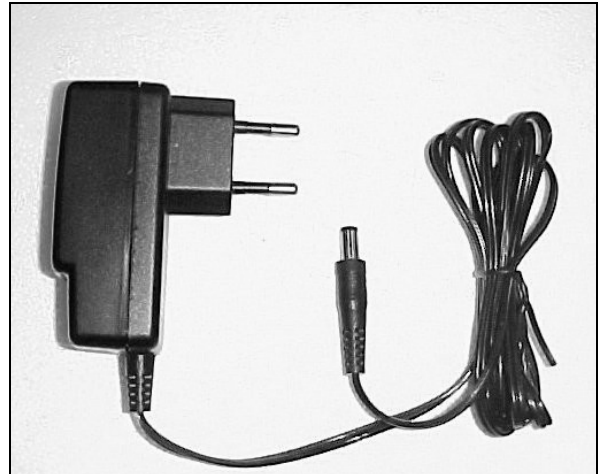


## AC/DC POWER SUPPLY

PRELIMINARY DATA

### FEATURES

- EUROPEAN INPUT VOLTAGE 230V<sub>ac</sub>
- SINGLE OUTPUT MAX 8W
- EMC COMPLIANCE ACCORDING TO EU DIRECTIVES
- SAFETY APPROVAL ACCORDING TO EN60950 / EN60065
- OUTPUT VOLTAGE PRECISION:  $\pm 5\%$
- INPUT FUSE PROTECTION
- OUTPUT SHORT CIRCUIT PROTECTION
- 2 WIRES DC CORD 1.5 m TERMINATED WITH 5.5 mm (ext. diam.) / 2.1 mm (int. diam.) JACK CONNECTOR
- LOW STAND BY POWER CONSUMPTION
- AVAILABLE WITH EU PLUG
- CE MARKED



### DESCRIPTION

The Power Plug is a high efficiency AC/DC switch mode constant voltage generator.

Designed for a variety of residential applications, this wall plug-in power supply performs up to 8W output power.

Typical reference value for the off shelf solution is 12V 600mA.

Coming into a compact housing, the power plug can be assembled with EU plug identified by a specific ordering number.

Output DC power is ensured via a 2 wires cord with strain relief, terminated with a barrel connector.

Typical weight is 52 grams only, without cable.

### UPON REQUEST

Upon request and agreement, the power supply can be customized offering different current/voltage level, a variety of plugs (among which Uk, Us, etc..) and support to gain specific Agency Approvals, as well.

**Table 1. Electrical Characteristics ( $T_{amb}=25^{\circ}\text{C}$ , unless otherwise specified.) GSP-1206STM/x**

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
$V_i$	Input Voltage		187		264	$V_{RMS}$
$I_o$	Output Current	$T_{ambient}= 40^{\circ}\text{C}$ , $V_i = 187 \div 264 V_{ac}$	600			mA
$V_o$	Output Voltage	$V_i = 187 \div 264 V_{ac}$ , $I_o = 0 \div I_{max}$	11.4	12	12.6	V
$V_{or}$	Output Ripple	$I_o = I_{max}$			100	mVpp
$I_{osc}$	Output short circuit current	Hiccup mode			1.3	A
n	Efficiency	$P_O = 8 W$		80		%
$P_{stand\ by}$	Power consumption in no load condition	$V_i = 230 V_{RMS}$ , $I_o = 0 mA$			300	mW
$V_{is}$	Isolation voltage	Input to output	3000			$V_{RMS}$
$T_{op}$	Operating Ambient Temperature		0		50	$^{\circ}\text{C}$
$T_{stg}$	Storage Temperature Range		-20		70	$^{\circ}\text{C}$

**AGENCY APPROVALS**

The Power Plug is certified by competent agencies to comply with most popular safety and EMC requirements, including but not limited to:

EN60950

ETS300-342-1

EN60065

EN55022 Cl B

Figure 1. Mechanical Data Euro Plug version (dimensions in mm)

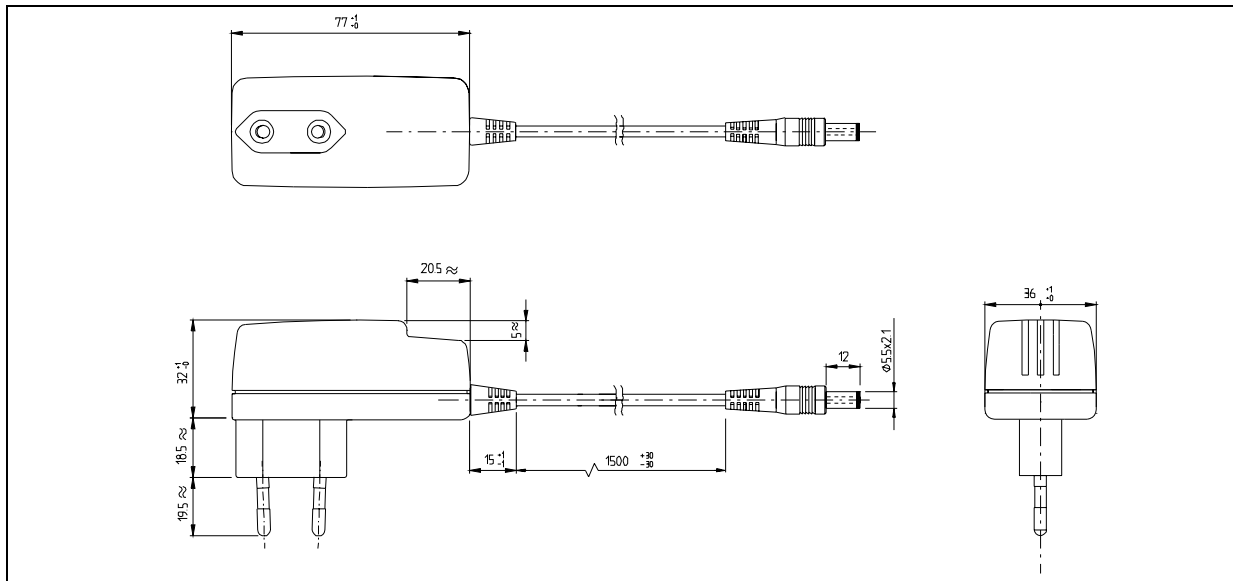


Figure 2. Ordering Information Scheme

<b>G S P - 1 2 0 6 S T M / n</b>	
<b>Plug Type</b>	
n = 1 Euro Plug, standard	
n = 2 Uk Plug, available upon request	

Table 2. Revision History

Date	Revision	Description of Changes
02-Nov.-2004	1	First Release

Information furnished is believed to be accurate and reliable. However, STMicroelectronics assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of STMicroelectronics. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. STMicroelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of STMicroelectronics.

The ST logo is a registered trademark of STMicroelectronics.  
All other names are the property of their respective owners

© 2004 STMicroelectronics - All Rights Reserved

STMicroelectronics GROUP OF COMPANIES

Australia - Belgium - Brazil - Canada - China - Czech Republic - Finland - France - Germany - Hong Kong - India - Israel - Italy - Japan -  
Malaysia - Malta - Morocco - Singapore - Spain - Sweden - Switzerland - United Kingdom - United States of America

<http://www.st.com>