



POWER DESK 18W

AC/DC POWER SUPPLY

REV.01

FEATURES

- PRIMARY SWITCH MODE POWER SUPPLY
- WIDE RANGE INPUT VOLTAGE $90 \div 264 V_{ac}$
- 18 W SINGLE OUTPUT
- EMC COMPLIANCE ACCORDING TO EU DIRECTIVES
- SAFETY APPROVAL ACCORDING TO EN60950 / EN60065
- CE MARKED
- INPUT FUSE PROTECTION
- INPUT: SHAVER CONNECTOR
- OUTPUT VOLTAGE PRECISION: $\pm 5\%$
- OUTPUT RIPPLE VOLTAGE $< 200 \text{ mVpp}$
- OUTPUT SHORT CIRCUIT PROTECTION
- OUTPUT: 2 WIRES DC CORD TERMINATED WITH 5.5 mm (ext. diam.) / 2.5 mm (int. diam.) JACK CONNECTOR
- COMPLIANT with ETSI STAND BY POWER LOSSES REQUIREMENTS



DESCRIPTION

The GSAC-1215STMB is a high efficiency AC/DC switch mode constant voltage generator. Designed for a variety of residential users applications, this desk-top power supply performs up to 18W max output power. The output voltage and current levels are set up by design in accordance with customer requirements.

Typical reference values for the off shelf solution are 12V and 1.5A with the input V_{ac} ranging from 90 to 264 V_{rms} . Coming into a compact brick housing, assembled with SHAVER INPUT CONNECTOR. Output DC power is ensured via a 2 wires cord with strain relief, terminated with a barrel connector. Typical weight is 90 grams only, without cable.

POWER DESK 18W

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}\text{C}$, unless otherwise specified.)

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Unit
V_i	Input Voltage	$I_o = 0$ to 1.5 A	90		264	V_{RMS}
I_o	Output Current	$V_i = 90$ to 264 V_{rms}			1.5	A
I_{om}	Minimum Output Current for Continuous Operation Condition	$V_i=90 \div 264\text{ V}_{rms}$		25		mA
V_o	Output Voltage	$V_i = 90$ to 264 V_{RMS} $I_o = 1.5\text{ A}$	11.4	12	12.6	V
V_o	Output Voltage	$V_i = 90$ to 264 V_{RMS} $I_o = 0\text{ mA}$			12.6	V
V_{or}	Output Ripple	$V_i = 90$ to 264 V_{RMS} $I_o = 1.5\text{ A}$			150	mVpp
I_{osc}	Output short circuit current	$V_i = 90$ to 264 V_{RMS}			2.5	A
η	Efficiency	$V_i = 90 \div 264\text{ V}_{RMS}$ $P_O = 18\text{W}$	80			%
$P_{stand\ by}$	Power losses in no load condition	$V_i = 230\text{ V}_{RMS}$ $I_o = 0\text{ mA}$			1	W
V_{is}	Isolation voltage	Input to output	3000			V_{RMS}
T_{op}	Operating Ambient Temperature		0		40	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range		-20		70	$^{\circ}\text{C}$

AGENCY APPROVALS

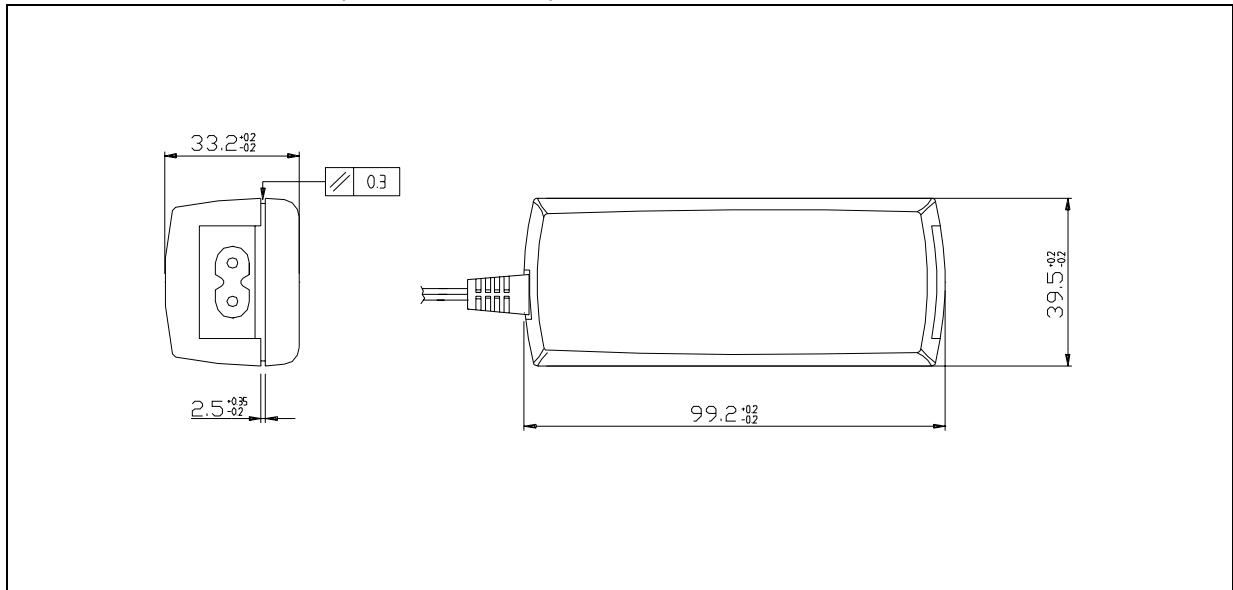
The GSAC-1215STMB is certified by competent agencies to comply with most popular safety and EMC requirements, including but not limited to:

EN60950

ETS300-342-1

EN60065

MECHANICAL DATA DESK (dimensions in mm)



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
® 2003 STMicroelectronics - All Rights Reserved

STMicroelectronics GROUP OF COMPANIES
Australia - Brazil - China - Finland - France - Germany - Hong Kong - India - Italy - Japan - Malaysia - Malta - Morocco - Singapore - Spain
- Sweden - Switzerland - United Kingdom - U.S.A.
<http://www.st.com>