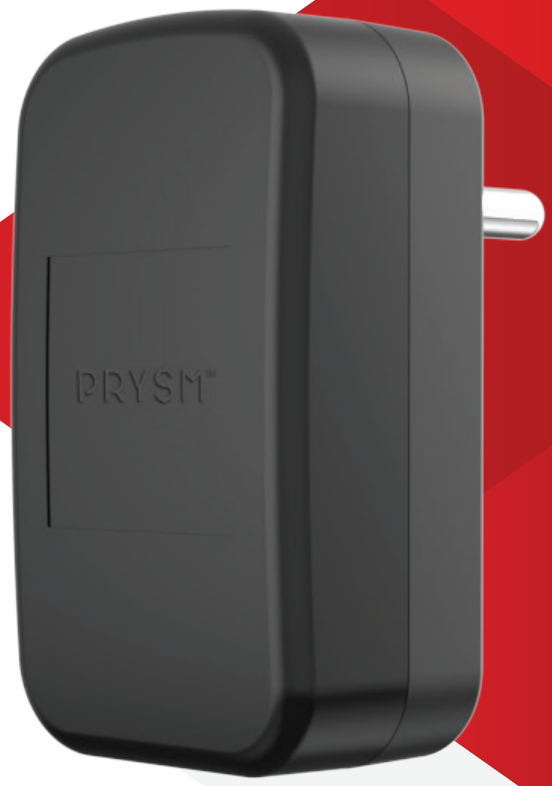
PRYSM®
Technology for all

PRYSM 12V/1A AC ADAPTER DATA SHEET



MAIN FEATURES

Power Rating	**12W**
Mains Input	**AC single phase**
Output	**12V-1A**

MODULE SPECIFICATIONS

3.1 AC INPUT

3.1.1	Input rated range	90 Vac-270 Vac
3.1.2	Input frequency	50/60 Hz
3.1.3	Input current	0.25 A Max
3.1.4	Efficiency	≤80% Under maximum load @ 230 Vac @ Room ambient 25°C
3.1.5	Inrush current	≤45A Max @ 230 Vac
3.1.6	No load power	<300mW

3.2 DC OUTPUT

3.2.1	Output voltage	12.0 V
3.2.2	Output current	1 A
3.2.3	Line regulation	<±1 %
3.2.4	Load regulation	<±2 %
3.2.5	Ripple & noise	<150mV @ 230 Vac & Full Load
3.2.6	Output over current	>1A-1.3A Max
3.2.7	Hold up time	>50m Sec @ 230 Vac input & Full Load
3.2.8	Turn-on delay	<50m Sec
3.2.9	Rise time	<30m Sec
3.2.10	Fall time	<10m Sec

TOP FEATURES

AUTO RESTART

OVERHEATING PROTECTION

SHORT CIRCUIT PROTECTION

3.3 PROTECTION

3.3.1 Output overload Short circuit Protection	It enters auto restart mode. Auto restart alternately enables and disables the switching of the power MOSFET until the fault condition is removed thereby protecting the equipment
3.3.2 Over temperature Protection	In case of overheating, the power MOSFET disables and remains disabled until it cools down.

3.4 ENVIRONMENT

3.4.1 Temperature	0°C-45°C Max
3.4.2 Humidity	93% RH at 40°C

3.5 PRODUCT SAFETY

3.5.1 Dielectric voltage withstand test(hi-pot)	3.0K Vac RMS, 50Hz for 1min
3.5.2 Touch current	The touch current shall be <0.25mA for class II equipment when power supply is operated at 240 Vac input voltage

3.6 RELIABILITY & QUALITY

3.6.1 Component derating factors	All semiconductors' junction temperatures do not exceed the manufacturer's maximum thermal rating, hence assuring reliability

3.7 EMI/EMC

3.7.1 Conducted emission	Design meets EN55022-class B
3.7.2 Surge immunity	As per test standard IEC61000-4-5 (Edition 2, 2005)
3.7.3 Electrical fast transient	As per test standard IEC61000-4-4 (Edition 3, 2012)

3.8 TERMINATIONS

3.8.1 AC input	AC input through 2-pin integrated Indian BIS Standard Plug
3.8.2 DC output	DC twin parallel cable 10 strands/0.152 mm wire of 1.2 m length

3.9 ELECTRICAL SAFETY

3.9.1 Protection from electric shock and energy hazards	As per the below test standard
3.9.2 SELV circuits	As per the below test standard
3.9.3 Limited power sources	As per the below test standard
3.9.4 Measurement of clearance and creepage distances	As per the below test standard

3.10 FIRE SAFETY

3.10.1 Resistance to fire	As per the below test standard

Test Standard

IS 13252(Part 1):2010+A1:2013+A2:2015
IEC 60950-1:2005 +A1:2009 +A2:2013

3.11 MECHANICAL PROPERTIES

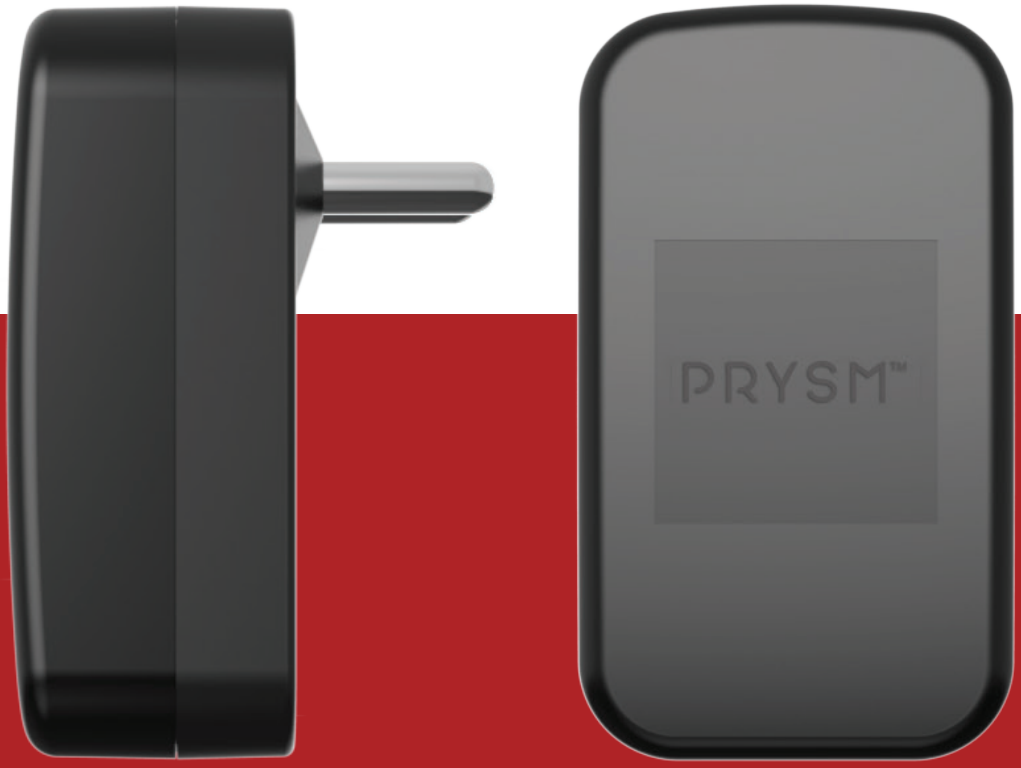
3.11.1 Edges and corners	Smooth edges and corners
3.11.2 Mechanical strength	Outer enclosure has sufficient strength to withstand expected handling connections

3.12 ENCLOSURE

3.12.1 Material	PC-ABS
3.12.2 Dimensions	70 x 41 x 24 mm
3.12.3 Enclosure colour	Black
3.12.4 AC pin material	Brass with tin plated

3.13 WEIGHT

75 gm with cable



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