



## ACDC150CR-19 high density 150W adaptor

The 150W ACDC150CR-19 is an adaptor employing high efficiency Active Diode technology (*US Pat. 6,134,131*) for output rectification, EMI cancellation technique (*U.S. Pat. 6,347,045*) as well as other patent pending technologies.

### Input :

Input voltage	100-240Vac
Input frequency	47-63Hz
Input current	<2.5A
Power Factor	>0.95 & conform EN61000-3-2 class D
Efficiency	92% typical
Input connector	Three wire type

### Output :

Max. Continuous O/P Power	150W
O/P voltage	19.5V DC
O/P. current	0A – 7.7A DC
O/P no load power	< 1W
Output connector	per request

### Environment:

Operating ambient	0°C – 40°C Convection cooled
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### EMC Characteristics

Conducted emission	EN55022, FCC level B
Radiated emission	EN55022, FCC level B

### Safety

Design to meet	IEC950, UL1950, VDE0805
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### Weight

600g

### PCB Dimension

162mm x 60mm x 25mm

### Case Dimension

170mm x 65mm x 35 mm





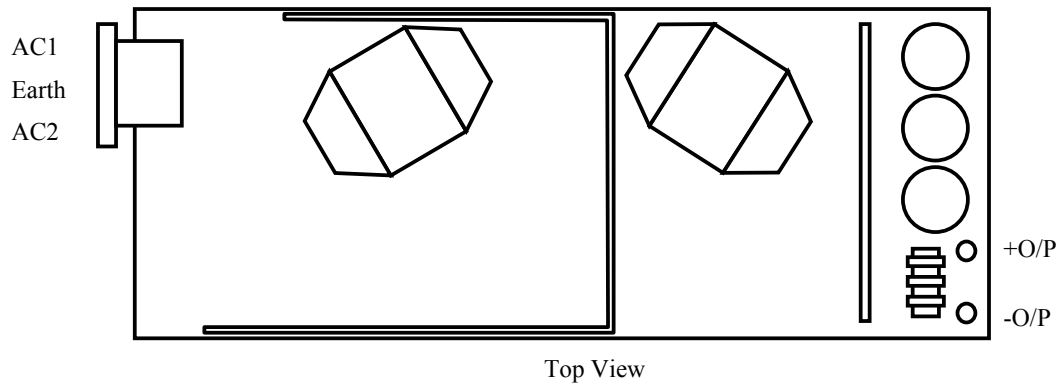
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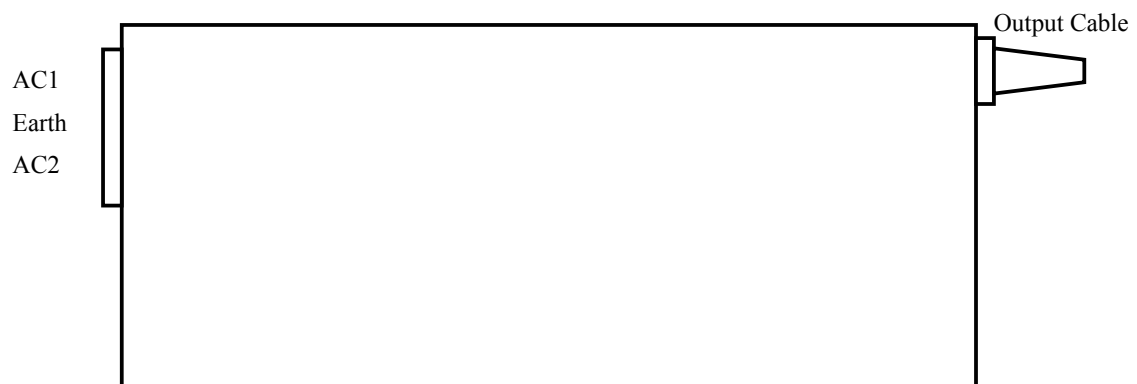


# 1 PCB Definition

## 1.1 Main PCB terminals Definition



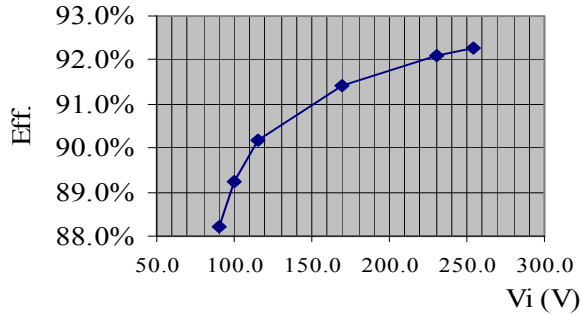
## 1.2 Case terminals Definition



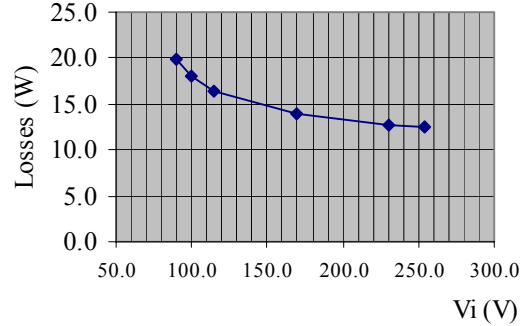


## 2 Measurement Result

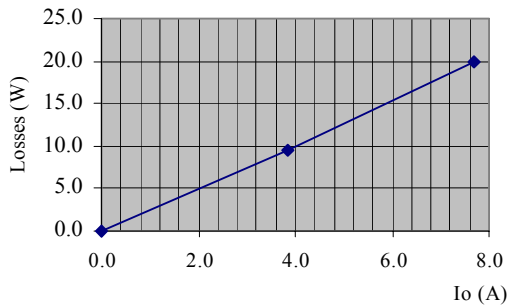
### 2.1 Input Output Characteristic



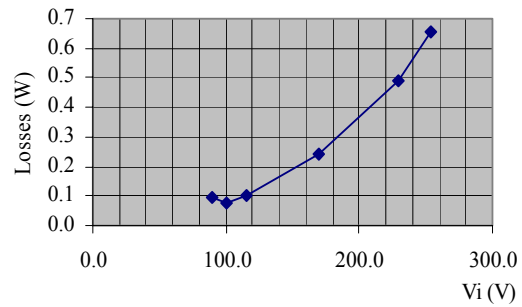
Full load efficiency against input voltage  
(Ignore Output Cable)



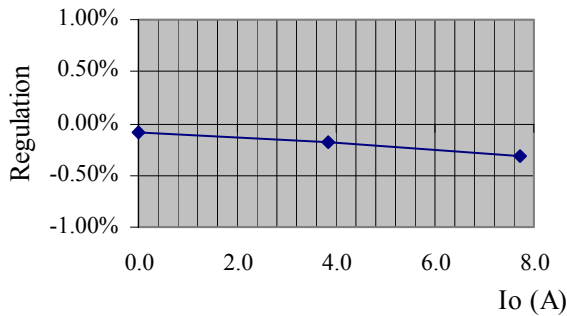
Full load power losses against input voltage  
(Ignore Output Cable)



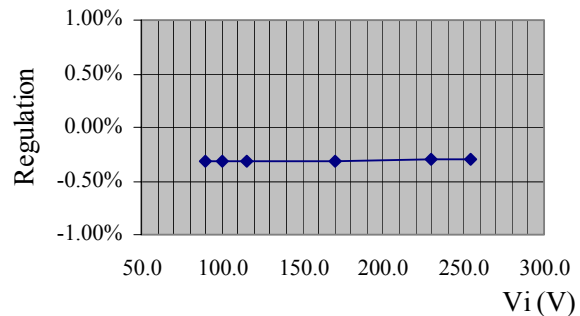
Power losses against output Loading @ 90V  
input (Ignore Output Cable)



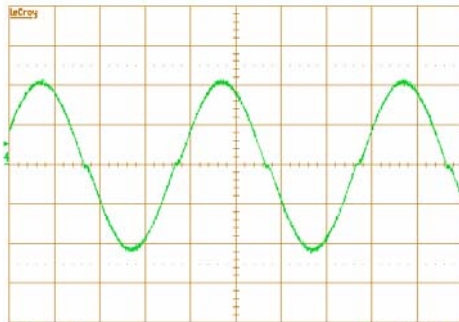
No load power losses against input voltage



Load regulation @ 90V input  
(0.5M O/P cable)

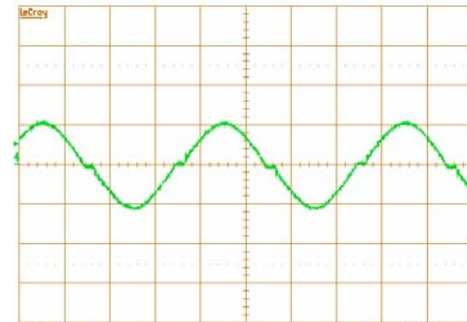


Full load line Regulation  
(0.5M O/P cable)



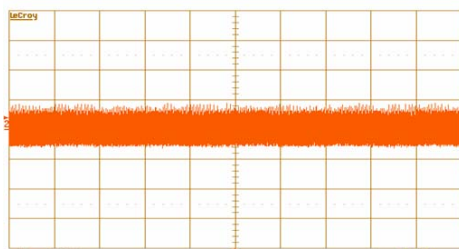
Horizontal : 5ms/div, vertical : 1A/div

Input current waveform @ 115V input

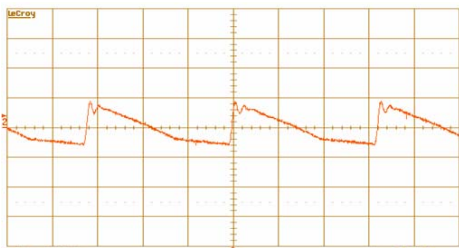


Horizontal : 5ms/div, vertical : 1A/div

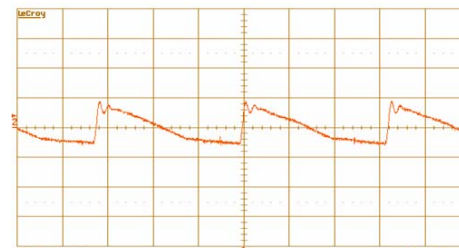
Input current waveform @ 230V input



Horizontal : 5ms/div, vertical : 100mV/div



Horizontal : 5ms/div, vertical : 100mV/div

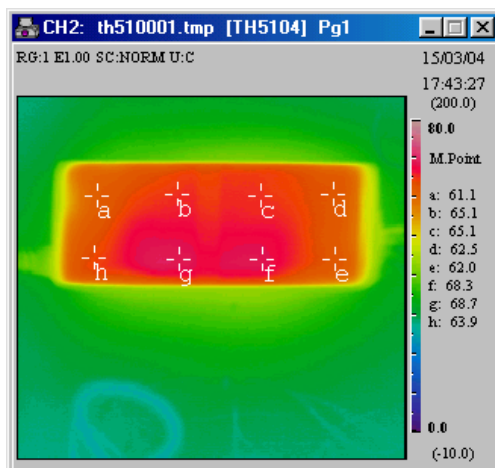


Horizontal : 5us/div, vertical : 100mV/div

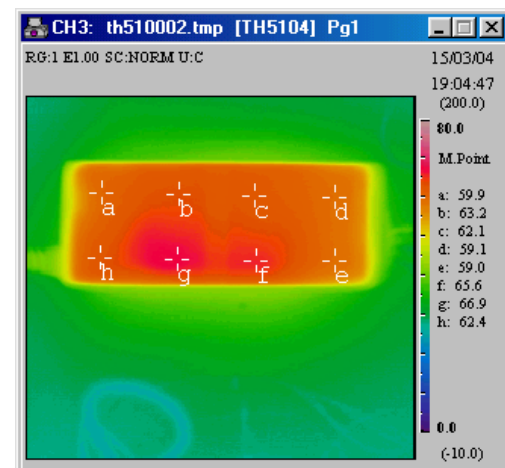
Full load output ripple @ 90V input

Horizontal : 5us/div, vertical : 100mV/div

Full load output ripple @ 254V input



Case surface temp at full load 90V input  
 (25°C ambient)

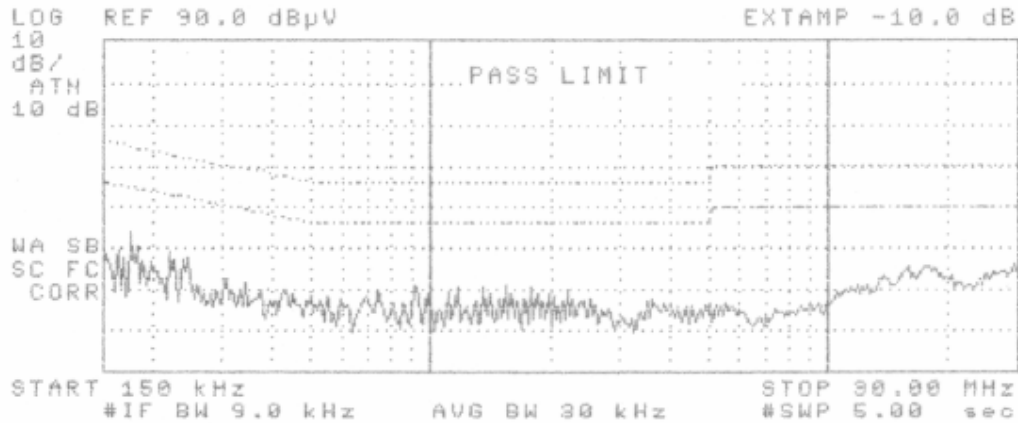


Case surface temp at full load 100V input  
 (25°C ambient)

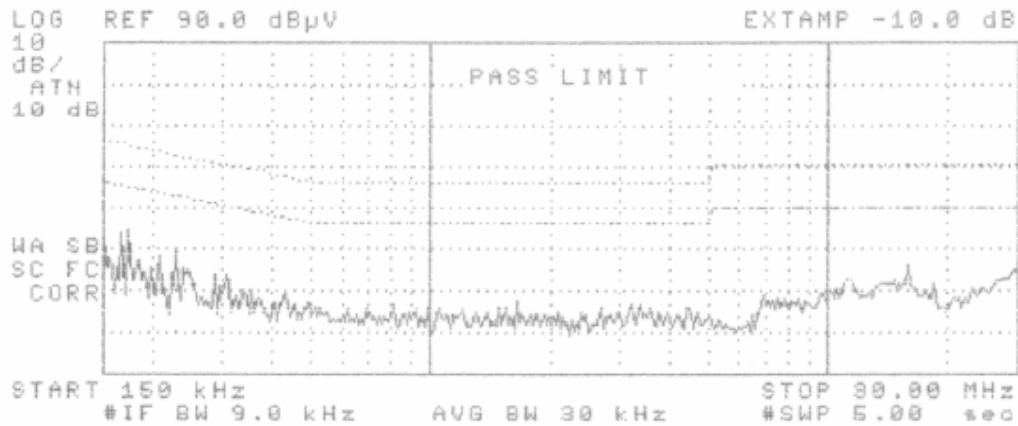


## 2.2 EMI Result

### 2.2.1 Line 1 conducted EMI



### 2.2.2 Line 2 conducted EMI



# ACDC120W-12A Ultra Small ACDC adaptor Preliminary Specification

## Scope

This document describes a converter employing high efficiency Current Driven Sync-Rect. technology (*US Pat. 6,134,131*) for output rectification, EMI cancellation technique (*U.S. Pat. 6,347,045*) as well as other patent pending technologies.

## Applications

Large LCD display, high performance computer, high power portable electronic appliances



## Input :

Input voltage	100-240Vac
Input frequency	47-63Hz
Input current	<2A
Input harmonic	conform to EN61000-3-2 class D
Efficiency	90% typical
No Load Standby Power	<1W
Input connector	two wire type IEC320/C8

## Output :

Max. Continuous O/P Power	120W
O/P voltage	12V DC
O/P. current	0A - 10A DC
Output connector	as on request

## Environment:

Operating ambient	0°C – 40°C Convection cooled
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## EMC Characteristics

Conducted emission	EN55022, FCC level B
Radiated emission	EN55022, FCC level B

## Safety

Design to meet	IEC950, UL1950, VDE0805
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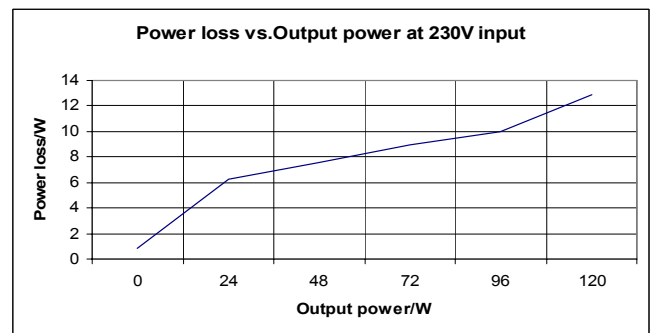
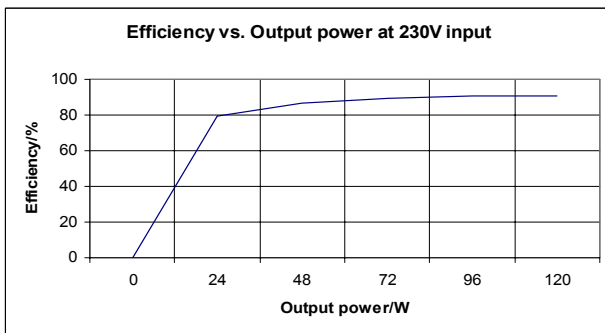
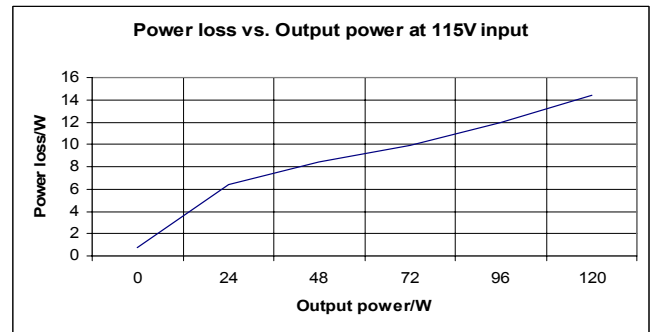
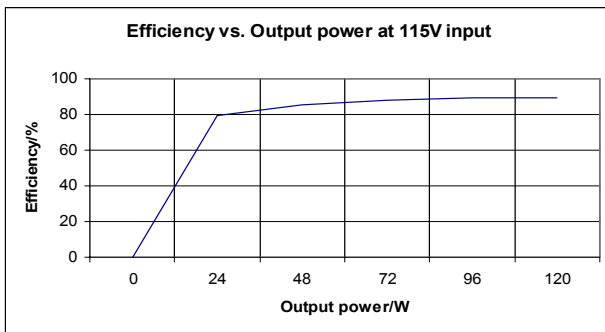
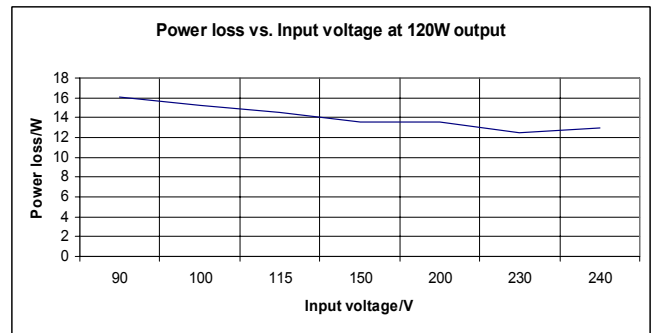
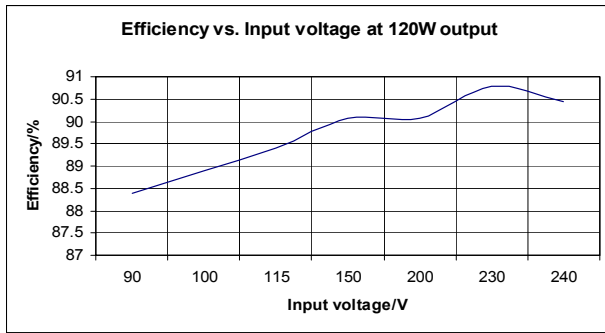
## Weight

approx 300g

## Mechanical Dimension

132mm x 69 x 27mm

## ACDC120W-12A Preliminary Measurements





# ACDC120W-12B Small ACDC adaptor Preliminary Specification

## Scope

This document describes a converter employing high efficiency Current Driven Sync-Rect. technology (*US Pat. 6,134,131*) for output rectification, EMI cancellation technique (*U.S. Pat. 6,347,045*) as well as other patent pending technologies.

## Applications

Large LCD display, high performance computer, high power portable electronic appliances

### Input :

Input voltage	100-240Vac
Input frequency	47-63Hz
Input current	<2A
Input harmonic	conform to EN61000-3-2 class D
Efficiency	88% typical
No Load Standby Power	<0.5W
Input connector	two wire type IEC320/C8



### Output :

Max. Continuous O/P Power	120W
O/P voltage	12V DC
O/P. current	0A - 10A DC
Output connector	as on request

### Environment:

Operating ambient	0°C – 40°C Convection cooled
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### EMC Characteristics

Conducted emission	EN55022, FCC level B
Radiated emission	EN55022, FCC level B

### Safety

Design to meet	IEC950, UL1950, VDE0805
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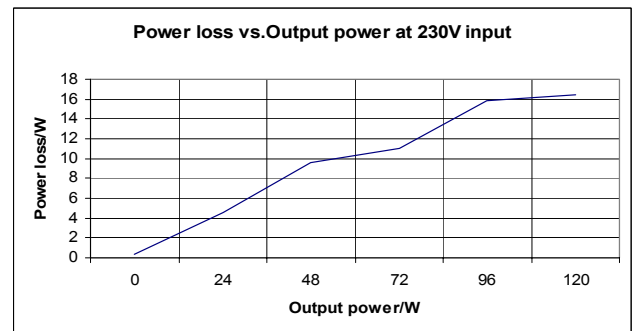
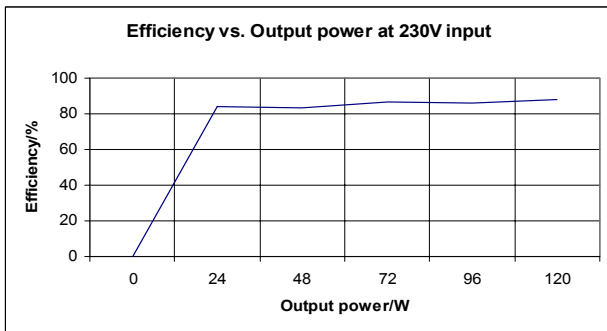
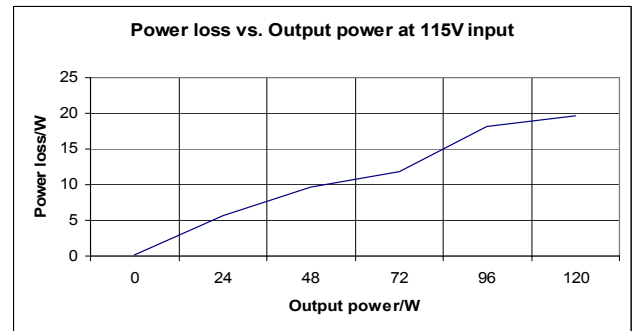
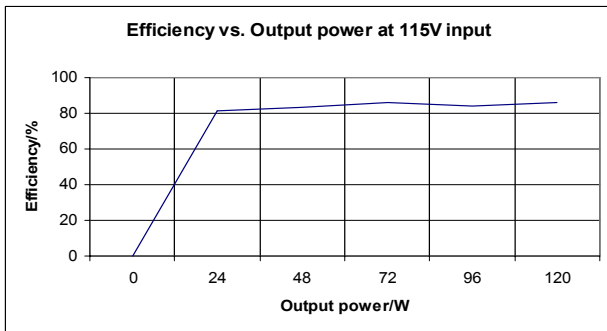
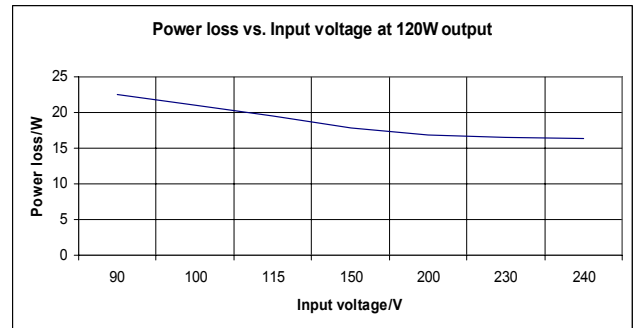
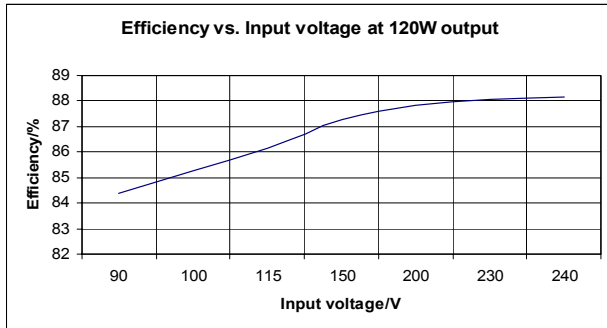
### Weight

approx 350g

### Mechanical Dimension

170mm x 85 x 35mm

# ACDC120W-12B Preliminary Measurement



Conducted EN55022 class B EMI test

