

Features

LED DRIVER

- 20W AC-DC LED Power Supply
- 350mA or 700mA Constant Current Output
- Drives 1 - 15 High brightness LEDs
- Universal AC Input
- Power Factor Correction
- Fused Input, Protected Output
- 3kVAC Isolation
- UL-8750 Certified
- Output Connector to avoid miswiring
- Low Cost

Description

A compact 20W constant current switching power module suitable for driving up to 15 high power LEDs ($V_f = 3.6V$). The output current is fixed at 350mA or 700mA. Power factor correction is standard.

This series features both screw terminal and socket output connections. The socket connector avoids the possibility of miswiring and damaging the LED load if the LEDs are preassembled into a wiring harness or lamp fitting with a mating plug.

Selection Guide

Part Number	Input Voltage Range (VAC)	Input Current at full load (mA)	Output Voltage Range (VDC)	Output Current (mA)	Max # LEDs
RACD20-350	100-240VAC	260	6-56	350	15 x 1W
RACD20-700	100-240VAC	260	6-29	700	8 x 2W, 8+8 x 1W

Specifications (typical at 25°C and after warm up time unless otherwise specified)

Input Voltage Range	Standard	100VAC-240VAC
Rated Power		20 Watts max.
Input Frequency Range		47-63 Hz
Power Factor	Full Load, 115VAC/230VAC	0.95
Output Voltage Range	350mA Version	6 - 56VDC
	700mA Version	6 - 29VDC
Inrush Current (<2mS)	115VAC/230VAC	10A max.
Input Current	230VAC, Full Load	260mA typ.
Leakage Current	115VAC/240VAC - 60/50Hz	0.5mA typ.
Input Fuse	Standard	T1A
Output Current Accuracy	(combined Tolerance, load Regulation and Line Regulation)	±10%
Minimum Load	Open Circuit Protected	2 LEDs
Output Ripple		150mA max.
Hold Up Time		18ms min.
Operating Frequency		40 - 100 kHz typ.
Efficiency at Full Load		83%
RMS Isolation Voltage (input to output)		3kVAC / 1 minute
Temperature Coefficient		±0.02%/°C typ.
Overload Protection		120% typ.
Short Circuit Protection		Continuous Current Limit
Output Overvoltage Protection	350mA Version	56V Zener Diode Clamp
	700mA Version	29V Zener Diode Clamp
Overtemperature Protection		Shutdown, Automatic restart after cooling down
Operating Temperature Range (free air convection)	Ambient Temperature	-20°C to +50°C
	Case Temp.	85°C max. (350mA version: 90°C max.)

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LIGHTLINE AC/DC-Converter



20 Watt PFC Single Output



RECOM
E340696

UL-8750 Certified

RACD20

Please Read Application Notes

www.recom-electronic.com

LIGHTLINE

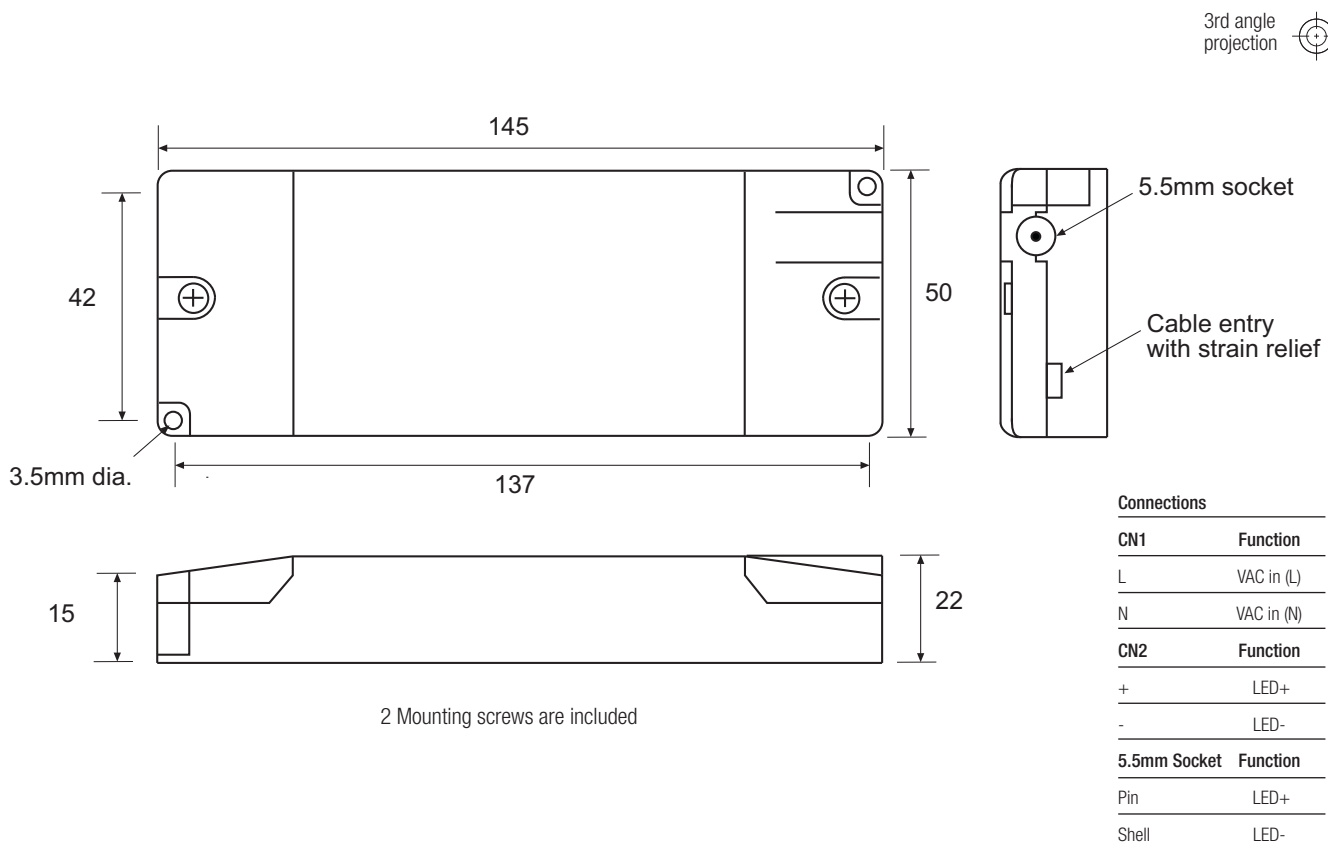
AC/DC-Converter

RACD20

Specifications cont. (typical at 25°C and after warm up time unless otherwise specified)

Weight		140g
Packing Quantity		1pc
Storage Temperature Range		-40°C to +100°C
Humidity		95% RH max.
IPRating		IP20
PCB Material		Plastic Resin with Fibreglass (UL94V-0)
Case Material		Plastic
Designed to meet Standards	Lamp Control Gear, General Safety	EN 61347-1:2001
	Lamp Control Gear for LED Modules	EN 61347-2-13:2006
	Electrical Lighting, EMC Emissions	EN55015:2001, FCC18A
	Limits for Harmonics Emissions	EN 61000-3-2:2006
	EMC Compatibility: Flicker and Voltage Variations	EN 61000-3-3:2001
	Electrical Lighting: EMC Immunity	EN 61547:1995 + A1: 2000
	Class II Power Supply Safety	UL1310
Certifications	LED Lighting Safety	UL8750
Design Lifetime	25°C ambient	>70 x 10 ³ hours in operation
Connections	AC Input	Screw terminal
	LED Output	Screw Terminal
	LED Output	5.5mm Socket with 2mm Pin

Package Style and Pinning



RACD20