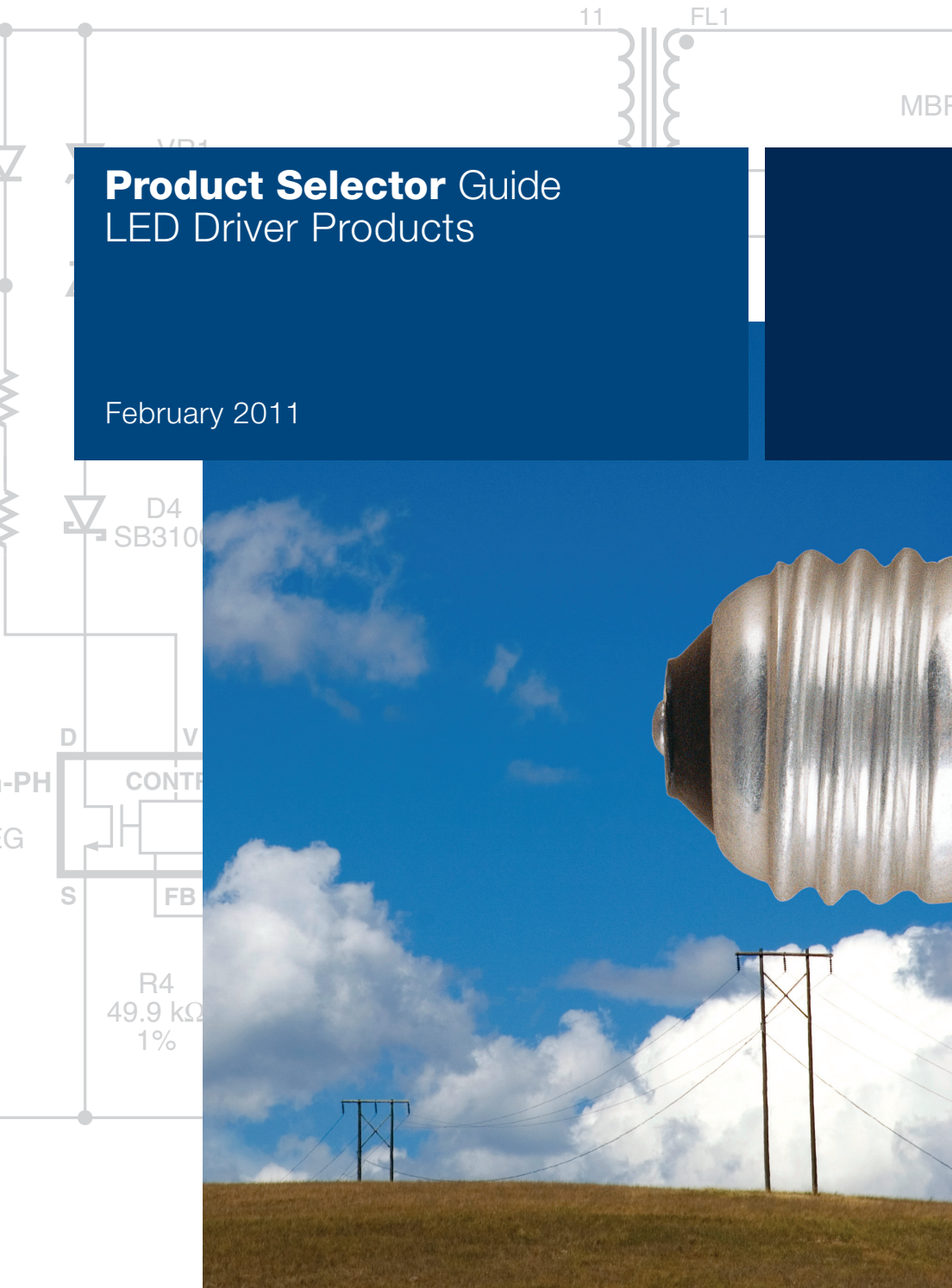


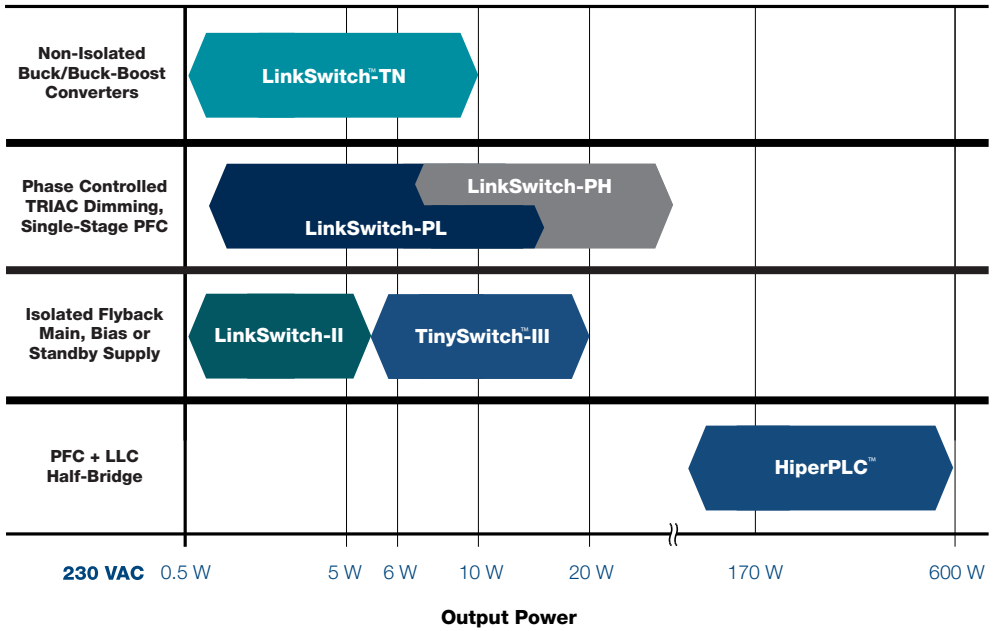
Innovation in power conversion

Product Selector Guide
LED Driver Products

February 2011



Product Selector Guide



IC Product Tables and Design Examples

TRIAC Dimmable, Single Stage PFC, Medium Power AC-DC Power Conversion^{1,2} (Up to 50 W)

Product ⁵	Minimum Output Power ³ (W)	Maximum Output Power ⁴ (W)	Minimum Output Power ³ (W)	Maximum Output Power ⁴ (W)
	$R_{\gamma} = 2 \text{ M}\Omega$		$R_{\gamma} = 4 \text{ M}\Omega$	
LinkSwitch-PH	85-132 VAC		85-308 VAC	
LNK403/413E	2.5	4.5	6.5	12
LNK404/414E	2.5	5.5	6.5	15
LNK405/415E	3.8	7.0	8.5	18
LNK406/416E	4.5	8.0	10	22
LNK407/417E	5.5	10	12	25
LNK408/418E	6.8	13.5	16	35
LNK409/419E	8.0	20	18	50

Additional Features:

- Single-stage power factor correction and accurate constant current (CC) output
- Flicker-free phase-controlled TRIAC dimming
- Primary side control eliminates optocoupler and all secondary current control circuitry
- Eliminates electrolytic bulk capacitor
- Eliminates all control loop compensation circuitry
- Simple PWM dimming interface

Notes:

1. Continuous power in an open frame with adequate heat sinking at device local ambient of 70 °C.
2. Power level calculated on typical LED string voltage with efficiency >80%.
3. Minimum output power with $C_{sp} = 10 \mu\text{F}$.
4. Maximum output power with $C_{sp} = 100 \mu\text{F}$. LNK403E, $C_{sp} = 10 \mu\text{F}$.
5. Package: eSIP™-7C.

TRIAC Dimmable, Single Stage PFC, Low Power AC-DC Power Conversion (Up to 16 W)

Product ²	Minimum Output Power ¹ (W)	Maximum Output Power ¹ (W)
LinkSwitch-PL	85-265 VAC	
LNK454D	1.5	3
LNK456D	3	6
LNK457D/K/V	4	8
LNK458K/V	6	11.5
LNK460K/V	8	16

Additional Features:

- Single-stage power factor correction and accurate constant current (CC) output
- Flicker-free phase-controlled TRIAC dimming
- Very low component count with small non-electrolytic bulk capacitor, for compact replacement lamp designs
- Compact SO-8C package
- Completely eliminates control loop compensation

Notes:

1. Maximum practical continuous power in an open frame design with adequate heat sinking, measured at +50 °C ambient
2. Packages: D: SO-8C, V: eDIP-12.

Low Power AC-DC, Non-Isolated Linear/Passive Supply Replacement ($\leq 360 \text{ mA}$)

Product ⁴	Output Current ¹ (mA)		Output Current ¹ (mA)	
	MDCM ²	CCM ³	MDCM ²	CCM ³
LinkSwitch-TN	230 VAC \pm 15%		85-265 VAC	
LNK302P/G/D	63	80	63	80
LNK304P/G/D	120	170	120	170
LNK305P/G/D	175	280	175	280
LNK306P/G/D	225	360	225	360

Additional Features:

- 700 V internal MOSFET rating
- Self-powered
- ON/OFF control
- Hysteretic thermal shutdown
- Power limiting
- Frequency jitter reduces EMI
- EcoSmart[®] low standby/no-load power consumption

Notes:

1. Typical output current in a non-isolated buck converter. Output power capability depends on respective output voltage.
2. Mostly discontinuous conduction mode.
3. Continuous conduction mode.
4. Packages: P: DIP-8B, G: SMD-8B, D: SO-8C.

Low Power AC-DC Power Conversion (Up to 6.1 W)

Product ³	Continuous Output Power (W)		Continuous Output Power (W)	
	Adapter ¹	Open Frame ²	Adapter ¹	Open Frame ²
LinkSwitch-II	230 VAC ± 15%		85-265 VAC	
LNK603/613P/D	2.5	3.3	2.5	3.3
LNK604/614P/D	3.5	4.1	3.5	4.1
LNK605/615P/D	4.5	5.1	4.5	5.1
LNK606/616P/G/D	5.5	6.1	5.5	6.1
LNK632D	3.1	3.1	3.1	3.1

Additional Features:

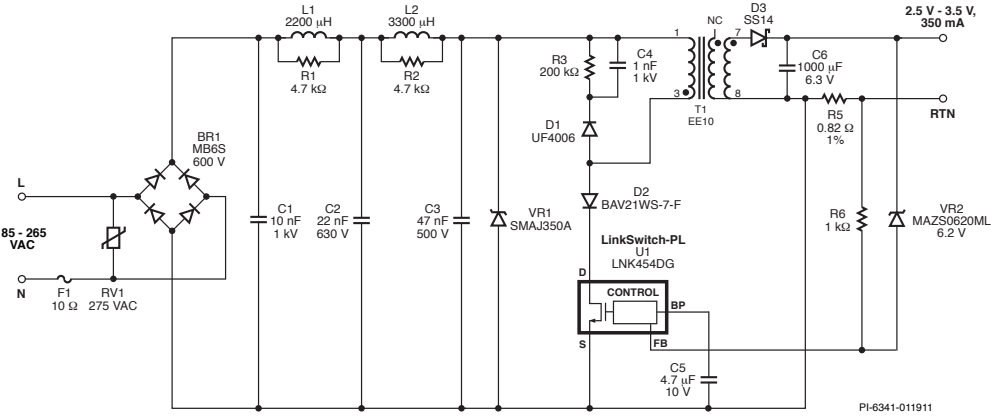
- 700 V internal MOSFET rating
- Self-powered
- ON/OFF control
- Hysteretic overtemperature protection
- Power limiting
- Frequency jitter reduces EMI
- EcoSmart low standby/no-load power consumption

Notes:

1. Minimum continuous power in a typical non-ventilated enclosed adapter measured at 50 °C ambient.
2. Minimum practical continuous power in an open frame design with adequate heat sinking, measured at 50 °C ambient.
3. Packages: P: DIP-8C, G: SMD-8C, D: SO-8C.

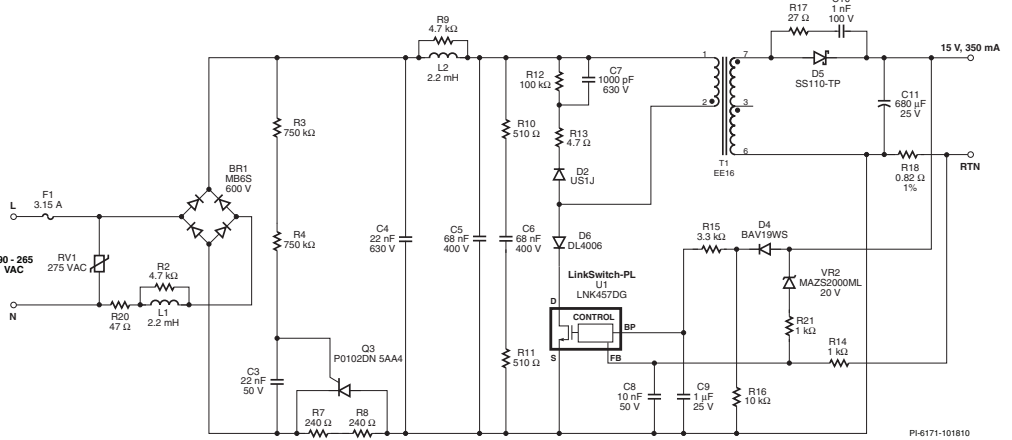
LinkSwitch-PL – High Efficiency, High Power Factor, LED Driver (RDK-268)

1.2 W, 2.5 V – 3.5 V, 366 mA OUTPUT, 85 – 265 VAC INPUT, SINGLE STAGE PFC, FLYBACK POWER SUPPLY



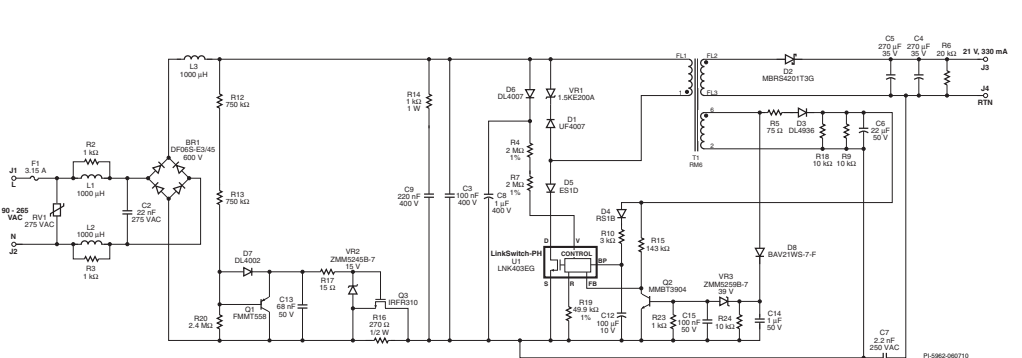
LinkSwitch-PL – Non-Isolated TRIAC Dimmable Power Factor Corrected LED Driver (RDK-251)

5 W, 15 V, 350 mA OUTPUT, 90 – 265 VAC INPUT, SINGLE STAGE PFC, FLYBACK POWER SUPPLY



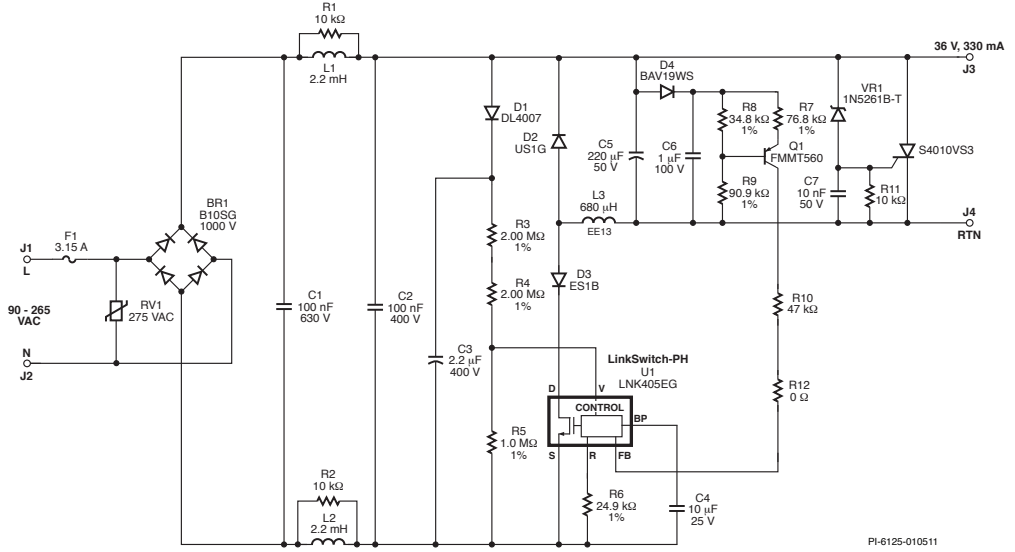
LinkSwitch-PH – High-Efficiency, High Power Factor, TRIAC Dimmable LED Driver (RDK-193)

7 W, 21 V, 330 mA OUTPUT, 90 – 265 VAC INPUT, SINGLE STAGE PFC, FLYBACK POWER SUPPLY



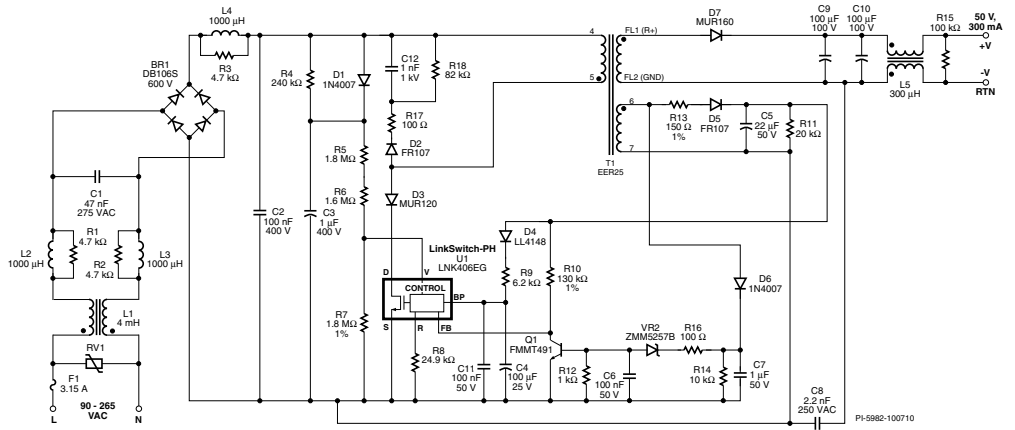
LinkSwitch-PH – High-Efficiency, High Power Factor, LED Driver (RDK-257)

12 W, 36 V, 330 mA OUTPUT, 90 – 265 VAC INPUT, SINGLE STAGE PFC, BUCK CONVERTER POWER SUPPLY



LinkSwitch-PH – High Efficiency, High Power Factor, LED Driver (DER-256)

15 W, 50 V, 300 mA OUTPUT, 90 – 265 VAC INPUT, SINGLE STAGE PFC, FLYBACK POWER SUPPLY



LinkSwitch-TN – Non-Isolated, Constant Current Light Bulb Replacement (RDK-131)

3 W, 9 V – 15 V, 300 mA OUTPUT, 85 – 265 VAC INPUT BUCK CONVERTER

