<table>
<thead>
<tr>
<th>Boost PFC, and LLC Half-Bridge</th>
<th>HiperPFS™-3 (PFC)</th>
<th>HiperLCS™ (LLC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRIAC Dimming, PFC, Isolated and Non-Isolated Flyback, Buck, and Buck-Boost</td>
<td>LYTSwitch™-4</td>
<td>LinkSwitch™-PH</td>
</tr>
<tr>
<td></td>
<td>LYTSwitch-3</td>
<td></td>
</tr>
<tr>
<td>PFC, Non-Dimming Non-Isolated Buck</td>
<td>LYTSwitch-1</td>
<td></td>
</tr>
<tr>
<td>PFC, Isolated and Non-Isolated Flyback, Buck, and Buck-Boost</td>
<td>LYTSwitch-5</td>
<td></td>
</tr>
<tr>
<td>Isolated and Non-Isolated Flyback, Buck, and Buck-Boost (Non-PFC)</td>
<td>LYTSwitch-2</td>
<td>LinkSwitch-4</td>
</tr>
<tr>
<td>Non-Isolated Buck or Buck-Boost (Non-PFC)</td>
<td>LYTSwitch-0</td>
<td></td>
</tr>
</tbody>
</table>
### LYTSwitch-0 – Lowest Component Count, Off-Line Switcher IC for Non-Isolated LED Lighting Applications\(^1\)

<table>
<thead>
<tr>
<th>Product(^6)</th>
<th>PF(^{\leq})</th>
<th>230 VAC ±15%</th>
<th>85-308 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MDCM(^2) (mA)</td>
<td>CCM(^3) (mA)</td>
<td>MDCM(^2) (mA)</td>
</tr>
<tr>
<td>LYT0002D/P</td>
<td>High</td>
<td>45</td>
<td>65</td>
</tr>
<tr>
<td>LYT0002D/P</td>
<td>Low</td>
<td>63</td>
<td>80</td>
</tr>
<tr>
<td>LYT0004D/P</td>
<td>High</td>
<td>85</td>
<td>110</td>
</tr>
<tr>
<td>LYT0004D/P</td>
<td>Low</td>
<td>98</td>
<td>139</td>
</tr>
<tr>
<td>LYT0005D/P</td>
<td>High</td>
<td>100</td>
<td>140</td>
</tr>
<tr>
<td>LYT0005D/P</td>
<td>Low</td>
<td>120</td>
<td>170</td>
</tr>
<tr>
<td>LYT0006D/P</td>
<td>High</td>
<td>165</td>
<td>220</td>
</tr>
<tr>
<td>LYT0006D/P</td>
<td>Low</td>
<td>200</td>
<td>280</td>
</tr>
</tbody>
</table>

**Additional Features:**
- High power factor meeting EU and USA requirements
- Very low component count
- Frequency jitter reduces EMI
- No bias winding or transformer required

**Notes:**
1. Typical output current in a non-isolated buck converter (see Key Applications Considerations section in data sheet for more information).
2. MDCM – mostly discontinuous mode.
3. CCM – continuous conduction mode.
4. PF high: >0.7 @ 120 VAC and >0.5 @ 230 VAC.
5. PF low: for non-PF application where \(C_{\text{IN}}\) >5 \(\mu F\) minimum.

### LYTSwitch-1 – Single-Stage LED Driver IC with Combined PFC and Constant Current Output for Buck Topology

<table>
<thead>
<tr>
<th>Product(^9)</th>
<th>Optimized for Smallest Components</th>
<th>Optimized for Lowest THD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(V_{\text{out}} \leq 30 \text{ V})</td>
<td>(45 \text{ V} \leq V_{\text{out}} \leq 55 \text{ V})</td>
</tr>
<tr>
<td>LYT1402D</td>
<td>4.0 W</td>
<td>8.0 W</td>
</tr>
<tr>
<td>LYT1403D</td>
<td>7.5 W</td>
<td>15 W</td>
</tr>
<tr>
<td>LYT1404D</td>
<td>11 W</td>
<td>22 W</td>
</tr>
</tbody>
</table>

**Additional Features:**
- CC regulation better than ±5%
- Power factor >0.9
- High efficiency >93%
- Critical Conduction Mode (CrM) buck, low EMI
- Excellent line noise and transient rejection

**Notes:**
1. Maximum practical continuous power in an open frame design with adequate heat sinking, measured at +50 °C ambient.
2. Output power scales linearly if \(V_{\text{OUT}}\) falls in between the specified voltages.

### LYTSwitch-2 – Energy-Efficient, Accurate Primary-Side Regulation CC/CV Switcher for LED Lighting Applications\(^2\)

<table>
<thead>
<tr>
<th>Product(^9)</th>
<th>90-308 VAC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enclosed Bulb(^9) (W)</td>
</tr>
<tr>
<td>LYT2001D</td>
<td>4</td>
</tr>
<tr>
<td>LYT2002D</td>
<td>5</td>
</tr>
<tr>
<td>LYT2003D</td>
<td>6</td>
</tr>
<tr>
<td>LYT2004D</td>
<td>7</td>
</tr>
<tr>
<td>LYT2004E/K</td>
<td>9</td>
</tr>
<tr>
<td>LYT2005E/K</td>
<td>10</td>
</tr>
</tbody>
</table>

**Additional Features:**
- Accurate CC regulation, meets ±3% in a typical design\(^1\)
- No-load consumption <30 mW\(^2\)
- Frequency jitter reduces EMI
- No bias winding or transformer required

**Notes:**
1. Nominal input and bias supply applied to BYPASS pin.
2. Performance for typical design.
3. Maximum continuous power in a typical non-ventilated bulb measured at +50 °C ambient, \(T_d \leq 100 ^\circ \text{C}\).
4. Maximum practical continuous power in an open frame design with adequate heat sinking, measured at +50 °C.
### IC Product Tables

#### LYTSwitch-3 – Single-Stage LED Driver IC with Combined PFC and Constant Current Output for Outstanding TRIAC Dimming in Isolated and Non-Isolated Topologies

<table>
<thead>
<tr>
<th>Product(^3)</th>
<th>Output Power(^2) (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYT33x4D(^2)</td>
<td>5.7</td>
</tr>
<tr>
<td>LYT33x5D</td>
<td>8.8</td>
</tr>
<tr>
<td>LYT33x6D</td>
<td>12.6</td>
</tr>
<tr>
<td>LYT33x8D</td>
<td>20.4</td>
</tr>
</tbody>
</table>

**Output Power**

85-132 VAC or 185-265 VAC

**Notes:**

1. Performance for typical design. See Applications Note.
2. “x” digit describes \( V_{DSON(MAX)} \) of the integrated switching MOSFET, 650 V = 1, 725 V = 2.
3. Package: D: SO-16B.

#### LYTSwitch-4 – Single-Stage Accurate Primary-Side Constant Current (CC) Controller with PFC for Applications with TRIAC Dimming and Non-Dimming Options\(^1\)\(^2\)

<table>
<thead>
<tr>
<th>Product(^5)</th>
<th>Minimum Output Power(^3)(W)</th>
<th>Maximum Output Power(^4)(W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYT4x11E/L</td>
<td>2.5</td>
<td>12</td>
</tr>
<tr>
<td>LYT4x12E/L</td>
<td>2.5</td>
<td>15</td>
</tr>
<tr>
<td>LYT4x13E/L</td>
<td>3.8</td>
<td>18</td>
</tr>
<tr>
<td>LYT4x14E/L</td>
<td>4.5</td>
<td>22</td>
</tr>
<tr>
<td>LYT4x15E/L</td>
<td>5.5</td>
<td>25</td>
</tr>
<tr>
<td>LYT4x16E/L</td>
<td>6.8</td>
<td>35</td>
</tr>
<tr>
<td>LYT4x17E/L</td>
<td>8.0</td>
<td>50</td>
</tr>
<tr>
<td>LYT4x18E/L</td>
<td>18</td>
<td>78</td>
</tr>
</tbody>
</table>

**Output Power**

85-132 VAC or 185-265 VAC

**Notes:**

1. Continuous power in open-frame design with adequate heat sinking, measured at 50 °C ambient (see Key Applications Considerations section in data sheet for more information).
2. Maximum practical continuous power in an open frame design with adequate heat sinking, measured at 50 °C ambient (see Key Applications Considerations section in data sheet for more information).
3. Package: D: SO-16B.

**Additional Features:**

- Less than ±3% CC regulation over line and load
- Power Factor >0.9
- Ensures monotonic VA reduction with TRIAC phase angle
- Low THD, 15% typical for dimmable bulbs, as low as 7% in optimized designs

---

**LYTSwitch-4 Specifications:**

- **Features:**
  - Better than ±5% CC regulation
  - TRIAC dimmable to less than 5% output
  - Fast start-up:
    - <250 ms at full brightness
    - <1s at 10% brightness
  - High power factor >0.9
  - Easily meets EN61000-3-2
  - Less than 10% THD in optimized designs
  - Up to 92% efficient
  - 132 kHz switching frequency for small magnetics

---

**Additional Features:**

- **Features:**
  - More than ±5% CC regulation
  - TRIAC dimmable to less than 5% output
  - Fast start-up:
    - <250 ms at full brightness
    - <1s at 10% brightness
  - High power factor >0.9
  - Easily meets EN61000-3-2
  - Less than 10% THD in optimized designs
  - Up to 92% efficient
  - 132 kHz switching frequency for small magnetics

---

**Notes:**

1. Performance for typical design. See Applications Note.
2. Continuous power in open-frame design with adequate heat sinking; device local ambient of 70 °C. Power level calculated assuming a typical LED string voltage and efficiency >80%.
3. Minimum output power requires \( C_{BP} = 47 \mu F \).
4. Maximum output power requires \( C_{BP} = 4.7 \mu F \).
5. LYT4211 \( C_{BP} = 47 \mu F \), LYT4221 \( C_{BP} = 4.7 \mu F \).
6. Package: eSIP-7C(E), eSIP-7F(L)
7. LYT4211 \( C_{BP} = 47 \mu F \), LYT4221 \( C_{BP} = 4.7 \mu F \).
8. Packages: eSIP-7C.
### LinkSwitch-PH – Single-Stage PFC, Primary-Side Constant Current Control and TRIAC Dimming/Non-Dimming Options\(^1,2\)

<table>
<thead>
<tr>
<th>Product(^3)</th>
<th>Minimum Output Power(^4) (W)</th>
<th>Maximum Output Power(^4) (W)</th>
<th>Minimum Output Power(^5) (W)</th>
<th>Maximum Output Power(^5) (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(R_p = 2 , \text{M} \Omega)</td>
<td>(R_p = 4 , \text{M} \Omega)</td>
<td>85-132 VAC</td>
<td>85-308 VAC</td>
</tr>
<tr>
<td>LNK403/413E/L</td>
<td>2.5</td>
<td>4.5</td>
<td>6.5</td>
<td>12</td>
</tr>
<tr>
<td>LNK404/414E/L</td>
<td>2.5</td>
<td>5.5</td>
<td>6.5</td>
<td>15</td>
</tr>
<tr>
<td>LNK405/415E/L</td>
<td>3.8</td>
<td>7.0</td>
<td>8.5</td>
<td>18</td>
</tr>
<tr>
<td>LNK406/416E/L</td>
<td>4.5</td>
<td>8.0</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>LNK407/417E/L</td>
<td>5.5</td>
<td>10</td>
<td>12</td>
<td>25</td>
</tr>
<tr>
<td>LNK408/418E/L</td>
<td>6.8</td>
<td>13.5</td>
<td>16</td>
<td>35</td>
</tr>
<tr>
<td>LNK409/419E/L</td>
<td>8.0</td>
<td>20</td>
<td>18</td>
<td>50</td>
</tr>
<tr>
<td>LNK410/420E/L</td>
<td>18</td>
<td>31</td>
<td>40</td>
<td>78</td>
</tr>
</tbody>
</table>

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 \(C_{\text{par}} = 10 \, \mu F\).
4. Maximum output power with \(C_{\text{par}} = 100 \, \mu F\). LNK4x3EG \(C_{\text{par}} = 10 \, \mu F\).
5. Package: eSIP-7C, eSIP-7F.

### IC Product Tables

**LYTSwitch-5** – Single-Stage LED Driver IC with Combined PFC and Constant Current Output in Isolated and Non-Isolated Topologies

<table>
<thead>
<tr>
<th>Product(^3)</th>
<th>Output Power(^4) (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LYT5225D</td>
<td>9</td>
</tr>
<tr>
<td>LYT5216D, LYT5226D</td>
<td>16</td>
</tr>
<tr>
<td>LYT5218D, LYT5228D</td>
<td>25</td>
</tr>
</tbody>
</table>

Notes:
1. Maximum practical continuous power in an open frame design with adequate heat sinking, measured at 50 °C ambient (see Key Applications Considerations section in data sheet for more information).
2. Package: D: SO-16B.

### Additional Features:
- Accurate CC, better than ±3%
- Power Factor >0.9
- Low THD, <10% with typical input and output conditions
- >90% efficient in optimized designs
- High switching frequency and DCM allow compact magnetics
- Supports buck, buck-boost, tapped-buck, boost, isolated and non-isolated flyback topologies
- 2 MOSFET voltage options and 3 power levels for optimum device selection
- No electrolytic bulk capacitors or optoisolators for increased lifetime
- Comprehensive protection features
  - Input and output overvoltage
  - Open-loop protection
- Advanced thermal control
  - Thermal foldback allows output light delivery at abnormally high ambient temperatures
  - Hysteretic shutdown provides protection during fault conditions

**LYTSwitch-5** – Single-Stage LED Driver IC with Combined PFC and Constant Current Output in Isolated and Non-Isolated Topologies

<table>
<thead>
<tr>
<th>Product(^3)</th>
<th>Minimum Output Power(^4) (W)</th>
<th>Maximum Output Power(^4) (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNK403/413E/L</td>
<td>2.5</td>
<td>4.5</td>
</tr>
<tr>
<td>LNK404/414E/L</td>
<td>2.5</td>
<td>5.5</td>
</tr>
<tr>
<td>LNK405/415E/L</td>
<td>3.8</td>
<td>7.0</td>
</tr>
<tr>
<td>LNK406/416E/L</td>
<td>4.5</td>
<td>8.0</td>
</tr>
<tr>
<td>LNK407/417E/L</td>
<td>5.5</td>
<td>10</td>
</tr>
<tr>
<td>LNK408/418E/L</td>
<td>6.8</td>
<td>13.5</td>
</tr>
<tr>
<td>LNK409/419E/L</td>
<td>8.0</td>
<td>20</td>
</tr>
<tr>
<td>LNK410/420E/L</td>
<td>18</td>
<td>31</td>
</tr>
</tbody>
</table>

Notes:
1. Maximum practical continuous power in an open frame design with adequate heat sinking, measured at 50 °C ambient (see Key Applications Considerations section in data sheet for more information).
2. Package: D: SO-16B.

### 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
### IC Product Tables

#### HiperPFS-3 – PFC Controller with Integrated High-Voltage MOSFET and Qspeed Diode Optimized for High PF and Efficiency Across Load Range

<table>
<thead>
<tr>
<th>Product</th>
<th>Maximum Continuous Output Power Rating at 90 VAC (W)</th>
<th>Peak Output Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFS7523L/H</td>
<td>110</td>
<td>120</td>
</tr>
<tr>
<td>PFS7524L/H</td>
<td>130</td>
<td>150</td>
</tr>
<tr>
<td>PFS7525L/H</td>
<td>185</td>
<td>205</td>
</tr>
<tr>
<td>PFS7526H</td>
<td>230</td>
<td>260</td>
</tr>
<tr>
<td>PFS7527H</td>
<td>290</td>
<td>320</td>
</tr>
<tr>
<td>PFS7528H</td>
<td>350</td>
<td>385</td>
</tr>
<tr>
<td>PFS7529H</td>
<td>405</td>
<td>450</td>
</tr>
</tbody>
</table>

#### HiperLCS – Integrated LLC Controller, High-Voltage Power MOSFETs and Drivers

<table>
<thead>
<tr>
<th>Product</th>
<th>Power (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCS700H/L</td>
<td>110</td>
</tr>
<tr>
<td>LCS701H/L</td>
<td>170</td>
</tr>
<tr>
<td>LCS702H/L</td>
<td>220</td>
</tr>
<tr>
<td>LCS703H/L</td>
<td>275</td>
</tr>
<tr>
<td>LCS705H</td>
<td>350</td>
</tr>
<tr>
<td>LCS708H</td>
<td>440</td>
</tr>
</tbody>
</table>

**Notes:**
1. Maximum practical continuous power at 90 VAC in an open-frame design with adequate heat sinking, measured at 50 °C ambient.
2. Internal output power limit.
4. For high-line only input devices, please refer to the table provided.

**Additional Features:**
- Incorporates high-voltage power MOSFET, ultra-low reverse recovery loss Qspeed diode, controller and gate driver.
- EN61000-3-2 Class C and Class D compliance.
- Integrated protection features reduce external component count.
- Accurate built-in undervoltage (UV) protection.
- Accurate built-in overvoltage (OV) protection.
- Hysteretic thermal shutdown (OTP).
- Internal power limiting function for overload protection.
- Cycle-by-cycle power switch current limit.
- Internal non-linear error amplifier for enhanced load transient response.
- No external current sense resistor required.
- Provides ‘lossless’ internal sensing via sense-FET.
- Reduces component count and system losses.
- Minimizes high current gate drive loop area.
- Minimizes output overshoot and stresses during start-up.
- Integrated power limit.
- Improved dynamic response.
- Digitally controlled input line feed-forward gain adjustment for flattened loop gain across entire input voltage range.
- Eliminates up to 40 discrete components for higher reliability and lower cost.
- High efficiency across load.
- High power factor across load.
- Low cost EMI filter.
- Frequency sliding technique for light load efficiency improvements.
- >95% efficiency from 10% load to full load achievable at nominal input voltages.
- Variable switching frequency to simplify EMI filter design.
- Varies over line input voltage to maximize efficiency and minimize EMI filter requirements.
- Varies with input line cycle voltage by >60 kHz to maximize spread spectrum effect.
- Up to 450 W [universal], 1 kW [high-line only] peak output power capability in a highly compact package.
- Simple adhesive or clip mounting to heat sink.
- No insulation pad required and can be directly connected to heat sink.
- Staggered pin arrangement for simple routing of board traces and high-voltage creepage requirements.
- Single package solution for PFC converter reduces assembly costs and layout size.

**Additional Features:**
- Accurate programmable minimum and maximum frequency limits.
- Precise duty symmetry balances output rectifier current, improving efficiency.
- Comprehensive fault handling and current limiting.
- Programmable brown-in/out thresholds and hysteresis.
- Undervoltage (UV) and overvoltage (OV) protection.
- Programmable over-current protection (OCP).
- Short-circuit protection (SCP).
- Over-temperature protection (OTP).
- Programmable dead-time.
- Programmable burst mode maintains regulation at no-load and improves light load efficiency.
- Programmable soft start time and delay before soft-start.
- Proprietary eSIP-16J package.
- Exposed thermal pad connected to ground potential – no insulators required between package and heat sink.
- Staggered pin arrangement for simple PC board routing and high-voltage creepage requirements.
# LED Down Light Designs

## Down Light Design Examples

<table>
<thead>
<tr>
<th>Product Family</th>
<th>AC Input Voltage (V)</th>
<th>Output Power (W)</th>
<th>Output Current (A)</th>
<th>TRIAC Dimming</th>
<th>Power Factor</th>
<th>Efficiency (%)</th>
<th>Topology</th>
<th>Document</th>
<th>RDK</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isolated Design Examples</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-2</td>
<td>190-265</td>
<td>4</td>
<td>0.167</td>
<td>&gt;0.67</td>
<td>80</td>
<td>Flyback</td>
<td>DER-421</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-2</td>
<td>90-265</td>
<td>5</td>
<td>0.335</td>
<td>&gt;0.39</td>
<td>80</td>
<td>Flyback</td>
<td>DER-434</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-2</td>
<td>190-265</td>
<td>7.2</td>
<td>0.33</td>
<td>&gt;0.74</td>
<td>80</td>
<td>Flyback</td>
<td>DER-422</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-2</td>
<td>90-270</td>
<td>7.8</td>
<td>0.13</td>
<td>&gt;0.36</td>
<td>85</td>
<td>Flyback</td>
<td>DER-430</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-2</td>
<td>90-265</td>
<td>8.64</td>
<td>0.18</td>
<td>&gt;0.45</td>
<td>86</td>
<td>Flyback</td>
<td>DER-424</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-3</td>
<td>90-132</td>
<td>9.5</td>
<td>0.35</td>
<td>✓</td>
<td>&gt;0.90</td>
<td>85</td>
<td>Flyback</td>
<td>DER-502</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-4</td>
<td>90-132</td>
<td>9.5</td>
<td>0.53</td>
<td>✓</td>
<td>&gt;0.96</td>
<td>81</td>
<td>Flyback</td>
<td>DER-353</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-2</td>
<td>90-265</td>
<td>12</td>
<td>0.5</td>
<td>&gt;0.70</td>
<td>85</td>
<td>Flyback</td>
<td>DER-440</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-4</td>
<td>90-132</td>
<td>12.6</td>
<td>0.37</td>
<td>✓</td>
<td>&gt;0.97</td>
<td>86</td>
<td>Flyback</td>
<td>DER-347</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-4</td>
<td>90-265</td>
<td>14</td>
<td>0.35</td>
<td>&gt;0.90</td>
<td>86</td>
<td>Flyback</td>
<td>DER-528</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LinkSwitch-PH</td>
<td>90-265</td>
<td>15</td>
<td>0.5</td>
<td>&gt;0.90</td>
<td>85</td>
<td>Flyback</td>
<td>DER-288</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-4</td>
<td>195-265</td>
<td>25</td>
<td>1.04</td>
<td>&gt;0.90</td>
<td>85</td>
<td>Flyback</td>
<td>DER-429</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LinkSwitch-PH</td>
<td>90-308</td>
<td>30</td>
<td>1</td>
<td>&gt;0.90</td>
<td>91</td>
<td>Flyback</td>
<td>DER-286</td>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LYTSwitch-4</td>
<td>90-132</td>
<td>30</td>
<td>0.5</td>
<td>✓*</td>
<td>&gt;0.95</td>
<td>85</td>
<td>Flyback</td>
<td>DER-442</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>LinkSwitch-PH</td>
<td>180-300</td>
<td>75</td>
<td>2.1</td>
<td>&gt;0.95</td>
<td>92</td>
<td>Flyback</td>
<td>DER-290</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HiperLCS</td>
<td>90-265</td>
<td>150</td>
<td>3.5</td>
<td>&gt;0.97</td>
<td>93</td>
<td>PFC + LLC</td>
<td>RDR-382</td>
<td>RDK-382</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>HiperPFS-3</td>
<td>90-264</td>
<td>275</td>
<td>0.71</td>
<td>&gt;0.90</td>
<td>95</td>
<td>PFC</td>
<td>DER-394</td>
<td>18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-Isolated Design Examples</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LYTSwitch-3</td>
<td>90-132</td>
<td>10</td>
<td>0.26</td>
<td>✓</td>
<td>&gt;0.9</td>
<td>85</td>
<td>Buck-Boost</td>
<td>DER-500</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>LinkSwitch-PH</td>
<td>140-280</td>
<td>12.8</td>
<td>0.80</td>
<td>✓</td>
<td>&gt;0.95</td>
<td>85</td>
<td>Tapped-Buck</td>
<td>DER-344</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>

*Analog dimming
**LYTSwitch-2 – Power Factor Corrected (Valley Fill), Non-Dimmable Isolated Flyback LED Driver (DER-421)**

4 W, 24 V, 167 mA OUTPUT, 190 – 265 VAC INPUT, SINGLE-STAGE PFC, ISOLATED FLYBACK, BALLAST POWER SUPPLY

**LYTSwitch-2 – High-Efficiency, CV/CC LED Driver (DER-434)**

5 W, 6 V – 15 V, 335 mA OUTPUT, 90 – 265 VAC INPUT, SINGLE-STAGE PFC, ISOLATED FLYBACK, BALLAST POWER SUPPLY
LYTSwitch-2 – High-Efficiency, Accurate Primary-Side Control, Constant Current, LED Driver (DER-422)
7.2 W, 24 V, 330 mA OUTPUT, 190 – 265 VAC INPUT, ISOLATED FLYBACK, BALLAST POWER SUPPLY

LYTSwitch-2 – High-Efficiency, Accurate Primary-Side Control, Constant Current, LED Driver (DER-430)
7.8 W, 24 V – 60 V, 130 mA OUTPUT, 90 – 270 VAC INPUT, ISOLATED FLYBACK, BALLAST POWER SUPPLY
LYTSwitch-2 – High-Efficiency, Accurate Primary-Side Control, Constant Current, LED Driver (DER-424)

8.64 W, 22 V – 48 V, 180 mA OUTPUT, 90 – 265 VAC INPUT, ISOLATED FLYBACK, BALLAST POWER SUPPLY

LYTSwitch-3 – High-Efficiency, Accurate, Constant Current, LED Driver (DER-502)

9.5 W, 27 V, 350 mA OUTPUT, 90 – 132 VAC INPUT, ISOLATED FLYBACK, DOWN LIGHT POWER SUPPLY
LED Down Light Designs

LYTSwitch-4 – High-Efficiency, High Power Factor, TRIAC Dimmable LED Driver (DER-353)
9.5 W, 18 V, 530 mA OUTPUT, 90 – 132 VAC INPUT, SINGLE-STAGE PFC, ISOLATED FLYBACK, TRACK LIGHT POWER SUPPLY

LYTSwitch-2 – High-Efficiency, Accurate Primary-Side Control with 130% Maximum CC OCP, LED Driver (DER-440)
12 W, 24 V, 500 mA OUTPUT, 90 – 265 VAC INPUT, SINGLE-STAGE PFC, ISOLATED FLYBACK, BALLAST POWER SUPPLY
LinkSwitch-PH – High-Efficiency, High Power Factor, LED Driver (DER-288)
15 W, 30 V, 500 mA OUTPUT, 90 – 265 VAC INPUT, SINGLE-STAGE PFC, FLYBACK, BALLAST POWER SUPPLY

LYTSwitch-4 – High-Efficiency, High Power Factor, CV/CC LED Driver (DER-429)
25 W, 24 V, 1.04 A OUTPUT, 195 – 265 VAC INPUT, SINGLE-STAGE PFC, ISOLATED FLYBACK, BALLAST POWER SUPPLY
Isolated Design Examples

LinkSwitch-PH – High-Efficiency, High Power Factor, LED Driver (DER-286)
30 W, 30 V, 1 A OUTPUT, 90 – 308 VAC INPUT, SINGLE-STAGE PFC, FLYBACK, BALLAST POWER SUPPLY
LYTSwitch-4 – Wide Output Voltage Range, Single-Stage Power Factor, LED Driver (DER-442)

30 W, 30 V – 60 V, 0.50 A OUTPUT, 90 – 132 VAC INPUT, SINGLE-STAGE PFC, ISOLATED FLYBACK, BALLAST POWER SUPPLY
Isolated Design Examples

LinkSwitch-PH – High-Efficiency, High Power Factor, LED Driver (RDK-290)
75 W, 29 V – 36 V, 2.1 A, 180 – 300 VAC INPUT, SINGLE-STAGE PFC, FLYBACK, STREET LIGHT POWER SUPPLY
HiperLCS – High-Efficiency, High Power Factor, LED Driver (RDK-382)
150 W, 43 V, 3.5 A OUTPUT, 90 – 265 VAC INPUT, INTEGRATED PFC AND LLC LED STREET LIGHT POWER SUPPLY

PFC STAGE

LLC STAGE
HiperPFS-3 – PFC Front-End for LED Street Light Designs (RDK-394)
275 W, 385 VDC, 710 mA OUTPUT, 90 – 264 VAC INPUT, INTEGRATED PFC FRONT-END POWER SUPPLY
Non-Isolated Design Examples

**LYTSwitch-3** – High-Efficiency, High Power Factor, TRIAC Dimmable LED Driver (DER-500)

10 W, 36 V – 40 V, 260 mA OUTPUT, 90 – 132 VAC INPUT, SINGLE-STAGE PFC, NON-ISOLATED BUCK-BOOST CONVERTER, DOWN LIGHT POWER SUPPLY

**LinkSwitch-PH** – Constant Current, High Power Factor, LED Driver (DER-344)

12.8 W, 16 V, 800 mA OUTPUT, 140 – 280 VAC INPUT, SINGLE-STAGE PFC, NON-ISOLATED TAPPED-BUCK CONVERTER, DOWN LIGHT POWER SUPPLY
Worldwide Sales Support Locations

World Headquarters
5245 Hellyer Avenue
San Jose, CA 95138, USA
Main: +1 408-414-9200
Customer Service
Phone: +1-408-414-9665
Fax: +1-408-414-9765
Email: usasales@power.com

On the Web
www.power.com

China (Shanghai)
Rm 2410, Charity Plaza, No. 88
North Caoxi Road
Shanghai, PRC 200030
Phone: +86-21-6354-6323
Fax: +86-21-6354-6325
e-mail: chinasales@power.com

China (Shenzhen)
17/F, HVAC Building, No. 2,
Keji Nan 8th Road, Nanshan District, Shen-
zhen, China, 518057
Phone: +86-755-8672-8689
Fax: +86-755-8672-8690
e-mail: chinasales@power.com

Germany
Lindwurmstrasse 114
80337 Munich, Germany
Phone: +49-89-527-39110
Fax: +49-89-527-39200
Email: eurosales@power.com

India
#1, 14th Main Road
Vasanthanagar
Bangalore-560052, India
Phone: +91-80-4113-8020
Fax: +91-80-4113-8023
Email: indiasales@power.com

Italy
Via Milianese 20, 3rd Fl.,
20099 Sesto San Giovanni (MI), Italy
Phone: +39-024-550-8701
Fax: +39-028-928-6009
Email: eurosales@power.com

Japan
Kosei Dai-3 Building
2-12-11, Shin-Yokohama,
Kohoku-ku,
Yokohama-shi, Kanagawa
222-0033 Japan
Phone: +81-45-471-1021
Fax: +81-45-471-3717
Email: japansales@power.com

Korea
RM 602, 6FL
Korea City Air Terminal B/D, 159-6
Samsung-Dong, Kangnam-Gu
Seoul, 135-728, Korea
Phone: +82-2-2016-6610
Fax: +82-2-2016-6630
Email: koreasales@power.com

Singapore
51 Newton Road
#19-01/05 Goldhill Plaza
Singapore, 308900
Phone: +65-6358-2160
Fax: +65-6358-2015
Email: singaporesales@power.com

Taiwan
5F, No. 318, Nei Hu Road, Sec. 1
Taipei 11493, Taiwan R.O.C.
Phone: +886-2-2659-4570
Fax: +886-2-2659-4550
Email: taiwansales@power.com

United Kingdom
Cambridge Semiconductor,
a Power Integrations company
Westbrook Centre, Block 5, 2nd Floor
Milton Road
Cambridge CB4 1YG
Phone: +44 (0) 1223-446483
e-mail: eurosales@power.com

©2016 Power Integrations Inc. The Power Integrations logo, TOPSwitch, TinySwitch, SENZero, SCALE-iDriver, Qspeed, PeakSwitch, LTYSwitch, LinkZero, LinkSwitch, InnoSwitch, HiperTFS, HiperPFS, HiperLCS, Q-Drive Switch, CAPZero, Camplero, EcoSmart, E-Shield, Filterfuse, FluxLink, StakFET, PI Expert and PI FACTS are trademarks of Power Integrations, Inc. All rights reserved.