

AC Transformer vs DC Power Pack

A technical reference for sales representatives, distributors, landscape contractors, and lighting designers.



How it works - AC Transformer	How it works - DC Power Pack
Alternating Current (AC)	Direct Current
AC transformers convert 120V household power down to 12V AC — the same type of current your home uses. The current alternates direction rapidly (60 times per second in the US), which works fine with many fixture types but can interact unpredictably with some LED drivers.	DC power packs convert 120V AC to 12V DC — a smooth, stable, one-directional flow of electricity. Modern LED fixtures are engineered around DC power, so they receive exactly what they need. The result is cleaner light, longer component life, and better system efficiency.
Output: 12/15V AC Input: 120 VAC SKUs: LTN1100AC, LTN3300AC	Output: 13.7V DC Input: 120 VAC SKU: LTN2150

FEATURE COMPARISON

Feature	AC Transformer	DC Power Pack
Current type	12V Alternating Current	12V Direct Current
Power surge protection	Limited	Full system
Compatibility with LEDs	AC LED drivers only	AC/DC LED drivers
Energy efficiency	Standard	Higher — less heat loss
LED lifespan impact	Neutral	Extended — clean power
LED flicker risk	Possible with some fixtures	None — stable DC output
Halogen compatibility	Yes	Not recommended
Expandable / daisy-chain zones	Limited by wattage	Yes — modular by design
Available wattages (LTN)	100W, 300W	150W base, expandable up to 600W
Price point	Lower upfront	Higher upfront, better long-term value

QUICK RECOMMENDATION GUIDE

Dimming capabilities	DC Power Pack
Expanding an existing AC-based system	AC Transformer
Remote controlling	DC Power Pack
Replacing a failed transformer in halogen system	AC Transformer
Complete surge protection	DC Power Pack
Budget is the primary constraint, short-term	AC Transformer
Need help specifying the right power supply?	
Our team is here to support you with product selection, and project planning. Contact your LTN rep or visit litethenite.com for full product specs and training videos.	

AC TRANSFORMERS



LTN1100AC

- Features:
- Built-in Photocell
 - Auto timer - Dusk on to timeout 1-9h
 - Auto – Dusk on Dawn off
 - Compact size for easy mount



LTN3300AC

- Features:
- Built-in photocell and Astronomic Timer
 - 12V-15V quick connects
 - Load indicator
 - Overload protection

DC POWER PACK



LTN2150

- Features:
- Dimmable
 - Photocell and timer operation
 - Full surge protection
 - RF Remote operation

Discover more at

litethenite.com

847 496 5276

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