

# Switch-Mode Magnetics — RFQ Checklist & Core-Selection Quick Reference

P&A International — engineering-led contract manufacturer of custom high-frequency & switch-mode magnetics

## What to send us for a fast, accurate quote

- 1 Schematic or topology, plus switching frequency
- 2 Input / output voltages, currents and power (turns ratio if known)
- 3 Isolation & safety requirements and target standards (e.g. IEC 62368-1, 61558, CE, UL)
- 4 Mechanical envelope — height, footprint, mounting — and any thermal limits
- 5 Target cost, annual volume or call-off pattern
- 6 Any reference design, competitor part number or physical sample

## Core / topology quick reference

| Topology           | Typical use               | Notes   |
|--------------------|---------------------------|---|
| Flyback            | Low-power isolated rails  | Simple, low parts count; watch leakage/snubber    |
| Forward / 2-switch | Mid-power                 | Better core utilisation than flyback              |
| Push-pull / bridge | Higher power              | Half / full-bridge for highest power              |
| LLC resonant       | High efficiency           | Soft-switching; tight magnetising/leakage control |
| Planar             | Low-profile, high density | Repeatable, automated build; excellent thermal    |

| Core family         | Best for  |
|---------------------|---|
| EE / EF / EFD / ETD | Most general SMPS work                          |
| RM / PQ             | Compact, low-EMI designs                        |
| EP / pot            | Shielded, low-EMI signal & small power          |
| Planar              | Low-profile, high-frequency, high power density |

Ranges: power ~1 W–3 kW · frequency 20 kHz–1 MHz+ · prototypes in 10–15 working days · one-off to high volume · every supplier in our network is ISO 9000 certified or better.

Send your spec to [support@pa-international.com.au](mailto:support@pa-international.com.au) — one dedicated engineer replies, typically within 48 hours, with a proposed design and indicative pricing.