

Toroidal Transformer

RFQ Checklist & Selection Quick Reference

Share as much of the detail below as you can — the more we have, the faster one dedicated engineer can return a proposed design and indicative pricing (typically within 48 hours). P&A International is an engineering-led contract manufacturer; every supplier in our network is ISO 9000 certified or better.

1. What to send us for a fast, accurate quote

- Primary and secondary voltages, VA rating and number of outputs
- Load regulation, taps and any electrostatic screen requirement
- Stray-field / audible-noise constraints (audio, medical, metrology)
- Isolation and safety requirements, and target standards
- Mechanical envelope — diameter, height, mounting, terminations — and thermal limits
- Target cost and annual volume or call-off pattern
- Any reference design, competitor part number or physical sample

2. Which toroidal type? - quick reference

Option	Best for
Power toroidal	General power, a few VA to multi-kVA, taps and multi-output windings.
Audio toroidal	Hi-fi and professional audio - lowest noise and stray field.
Medical & isolation	Reinforced isolation to IEC 61558 / UL for medical and safety-critical gear.
Autotransformer / choke	Variable-ratio autotransformers and toroidal chokes for power conditioning.

3. Design factors that shape the quote

- **Voltage & regulation:** primary/secondary voltages, taps and required regulation set the turns ratio, copper and core size.
- **Stray field & noise:** symmetrical winding, balancing and a magnetic screen minimise radiated field and audible hum.
- **Temperature rise:** core and copper loss set the insulation class; core size, wire gauge and potting keep it inside your thermal limit.
- **Isolation & safety:** creepage/clearance and insulation system to IEC 61558 / EN 61558, CE and UL, designed in from the start.
- **Mounting:** centre-bolt, base plate, flying-lead or fully potted, to suit your enclosure and assembly.

Send your completed checklist (and any drawing or sample) and one dedicated engineer will respond with a proposed design and indicative pricing. No project too big or too small.