

Custom Inductors & High-Frequency Transformers:

Solve Power-Module Design Pain-points for Global Engineers & Procurement

◆ Introduction

For power-module hardware design engineers and procurement specialists across Europe, the Middle East, Japan, South Korea, and Thailand, magnetic components — inductors, chokes and transformers — frequently become the bottleneck of product performance and project timeline.

Common industry pain-points include insufficient saturation current, excessive temperature rise, poor EMC performance, strict regional certification requirements, inflexible high-minimum-order quantities and extremely long prototype lead-times. Many engineers struggle to find suppliers balancing technical performance, compliance, small-batch flexibility and competitive cost.

Founded in 2019, Yu Yang Magnetic Co., LTD. (YETcoil) is a China-based manufacturer specializing in custom magnetic devices. We maintain an 18% R&D investment ratio, ultra-low 0.01% defect rate and 24-hour global technical support to support overseas power-module projects.

◆ Magnetic-Component Portfolio for Power-Module Applications

YETcoil supplies both standard off-the-shelf series and fully custom ODM / OEM magnetic parts covering mainstream power-module scenarios.

◆ Encapsulated Potting Mains Transformers

- Operating temperature: -40°C ~ 125°C, IP67 full-sealed epoxy potting
- Low ripple ≤50 mV, no-load loss down to 0.5 W
- UL, CE, VDE certified, dust-proof & moisture-proof
- Ideal for household appliances, LED street-light drivers and industrial power-supply units.

◆ Rod-Core Power Inductors

- Optimized as noise filters for switching regulators
- High saturation-current rating, varnish-coated or UL-insulated tube options
- -40°C ~ 125°C operating range, customizable footprint & electrical parameters.

◆ Nanocrystalline High-Current Common-Mode Chokes (CMC)

- High-permeability nanocrystalline core for superior common-mode noise suppression
- Product series: toroidal TCB252010S, UU-type common-mode chokes
- Wide temperature-range performance for power-supply EMI filtering.

◆ SMD Power Inductors (TCB / YEBF series)

Representative models: TCB1060R, YEBF3316

- Low ESR, small parasitic capacitance, low power loss

- High saturation-current & compact outline for DC/DC converter modules
- Support full customization of inductance, DCR and footprint constraints.

◆ **High-Frequency & Medical-Grade Magnetic Components**

- Rich transformer matrix: EFD, EP, RM, PQ, TOROIDAL-series high-frequency transformers
- Medical-grade inductors built to meet component-level requirements for IEC 60601 end-equipment
- Passed UDEM-issued EU EMC attestation, compliant with 2014/30/EU EMC directive and corresponding EN / IEC standards, simplifying market access for global regions.

◆ **Key Sourcing Advantages for Global Power-Module Teams**

1. Ultra-low MOQ & Industry-leading fast prototyping

Our minimum order quantity starts at 100 pieces, merely 1/10 of most large-scale magnetic-component manufacturers. We deliver prototype samples within 7 working days, accelerating your hardware validation cycle. Small-batch custom orders can achieve up to 50% cost reduction compared with international mainstream brands.

2. Full-set global compliance documentation

Our product portfolio holds UL, CE, VDE and UDEM EMC certificates. Medical-grade products satisfy IEC 60601 component-related requirements. We provide complete test reports and factory documents to support market entry requirements for EU, Middle East, Japanese PSE, Korean KC, Thai TISI and other regional standards.

3. Reliable performance for harsh working environments

Most product series maintain stable performance at -40°C ~ 125°C. IP67 sealed transformers withstand high-temperature, high-humidity and dusty conditions, perfectly matching Middle-East high-heat environments, European industrial sites and tropical Southeast-Asia operating conditions.

4. Flexible ODM & OEM custom engineering support

Our internal magnetic design team accepts your specification sheets, footprint constraints, BOM drop-in replacement requests or custom drawings. We tailor inductance, saturation-current, DCR, isolation voltage and winding parameters to match your power-module design targets, supporting both custom development and contract manufacturing.

5. Stable quality & cross-border-friendly service

Production defect rate controlled at 0.01 %. We maintain 24-hour rapid-response technical support and support local-currency settlement options for overseas buyers.

◆ **Typical Application Verticals**

Our inductors and transformers are widely deployed in Power-Module systems across multiple sectors:

- Household appliances: Microwave & home-appliance power-modules

- Smart-city lighting: LED street-light driver power modules
- Industrial automation: PLC power-supply systems and industrial switching converters
- Renewable-energy: Solar & wind-energy converter power-modules
- Medical electronics: IEC 60601-compliant medical power-supply magnetic parts
- Automotive electronics: Motor-controller power modules

◆ Frequently Asked Questions (FAQ Schema for Google Rich Snippet)

Q1: Can YETcoil provide drop-in replacement for existing brand inductors / transformers?

A: Yes. Submit original datasheets, key electrical parameters or sample photos. Our engineering team will evaluate equivalent or upgraded alternative drop-in solutions for your power-module layout.

Q2: What certification documents can you offer for EU, Japan, Korea, Thailand and Middle-East market clearance?

A: We supply CE-EMC attestation, UL/VDE certificates and full test reports. We adjust product parameters to satisfy PSE, KC, TISI and other local-region regulatory requirements.

Q3: What are your typical lead-times?

A: Custom prototypes take 7 working days. Mass-production lead-time depends on order volume. We provide firm timelines upon receiving your RFQ.

◆ Next Step for Your Power-Module Project

If you are a power-module design engineer or procurement manager sourcing inductors, common-mode chokes, encapsulated or high-frequency transformers:

1. Visit official website: <https://www.yetcoil.com> for complete datasheet resources
2. Send specifications, drawings or sample-request via Email: carlkuo@yetcoil.hk
3. WhatsApp hotline: +86 183 7482 7208 for instant technical consultation and quotation

We provide free pre-sales technical evaluation for your magnetic-component project. Whether you need off-the-shelf standard components or fully-customized ODM solutions for Europe, the Middle East, Japan, South Korea, Thailand and other global markets, YETcoil supports your whole product lifecycle: from lab prototyping through volume mass-production.