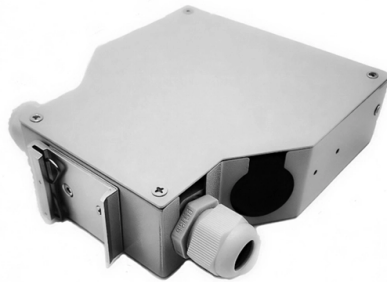


Optical module housing die casting



Article Overview

Die casting is a high-precision, high-pressure process used to produce durable, thermally efficient, and dimensionally stable optical module housings.

Overview of the Process

Die casting for optical module housings involves injecting molten metal, typically aluminum or zinc alloys, into precision steel molds under high pressure to form complex shapes with tight tolerances . This process allows for single-piece, intricate designs that ensure accurate alignment of optical components and minimize assembly errors .

Material Selection

- Aluminum alloys (e.g., ADC12) are preferred for their excellent thermal conductivity, lightweight properties, and dimensional stability, which help dissipate heat from high-speed optical components .
- Zinc alloys offer strength and durability, providing robust protection for sensitive optical elements . These materials enhance both structural integrity and long-term reliability of optical modules.

Design and Precision

Die-cast housings are designed with optimized wall thickness and thermal conduction paths to prevent local heat accumulation and maintain signal stability . The process achieves micron-level dimensional accuracy, with CNC machining tolerances often c...

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Aluminum · Magnesium · Zinc Precision Die Casting Solutions One-stop manufacturer for high-performance optical communication

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High-end zinc alloy die-cast housings for 100G to 1.6T optical modules. Mold design, die casting, CNC machining, surface treatment

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Custom Die Casting For Optical Transceiver Enclosure Supplier

GuangWei supplies SFP / SFP+ module housings with precision zinc alloy die-casting. High EMI shielding, superior heat dissipation,

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Optical Module Precision Die Casting Frame Housing

From initial design consultation to final production, we provide a seamless, collaborative partnership to create a housing solution that

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High-Performance Optical Module Housing Solutions

Metal Housings: The Traditional Powerhouse Metal housings, typically made from zinc or aluminum alloys via die-casting, have been

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Die-Casting Parts For Optical Transceiver Housing The structural organization of precision Die-Casting Parts are tight and the

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Zinc Die Casting QSFP28 Housings for Optical Transceiver

In conclusion, zinc die casting is an excellent choice for manufacturing QSFP28 housings for optical transceivers. Its

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Custom Die Casting For Optical Communication | GuangWei

Die casting is used for optical communication components to produce precision parts with complex geometries, such as SFP module

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Custom precision die-cast aluminum housings designed for high-speed optical modules, featuring integrated heat sink fins, EMI

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.greatpremiersolutions.co.za>

Email: sales@greatpremiersolutions.co.za

Phone: +27 82 914 3675

Address: Unit 5, Silicon Heights, 22 Electron Avenue, Cape Town, 8001, South Africa

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