应用智能科技实现迈向零碳
Application of Smart Technology to achieve Advancing Net Zero

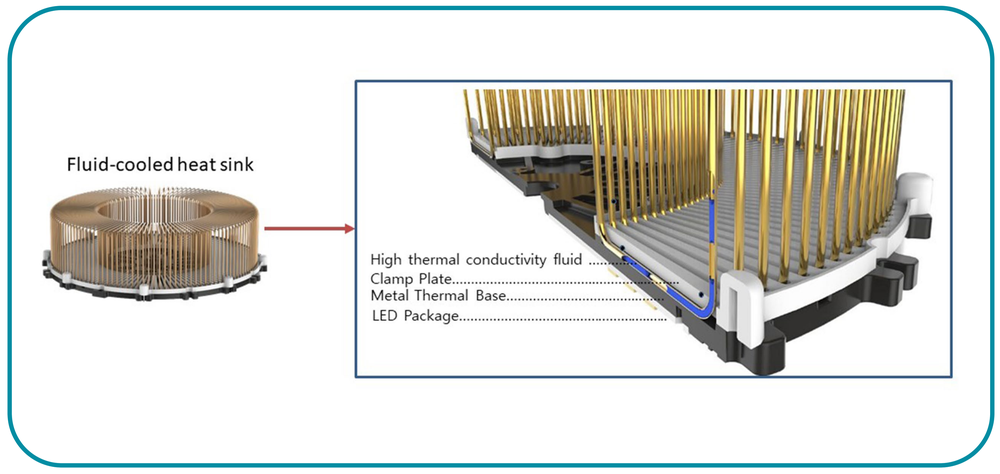
液冷散热器的 LED 灯具
Fluid-cooled Heatsink LED Lighting

作为香港特区政府的创新推动者，机电工程署(机电署)于 2019 年推出机电创科网上平台，列出各政府部门、公营机构及机电业界的服务愿望，并邀请创科界别提出相关创科方案进行对接。机电署会为成功匹配的项目进行实地试验，以推动创新技术的研发和应用。

创新创科解决方案示例：
液冷散热器 LED 灯具采用振荡毛细管式热管和高导热率液体来增强散热。机电署进行的一项试验显示用于高棚灯的液冷散热器 LED 比传统铝散热器 LED 的效率提高约 10%。

Being the innovation facilitator for the HKSAR government, Electrical and Mechanical Services Department (EMSD) launched the E&M InnoPortal in 2019 to list the service wishes of various government departments, public organisations and the E&M trades, and invite the I&T sector to propose relevant I&T solutions for matching. For successfully matched projects, EMSD will carry out field trials in a bid to promote and drive the research & development and application of innovative technologies.

Example of innovative I&T solution:
The fluid-cooled heatsink LED lighting uses oscillating capillary tube-type heat pipes and a high thermal conductivity fluid to enhance the heat dissipation.
A trial conducted by EMSD showed that the fluid-cooled heat sink LED lighting is approximately 10% more efficient than traditional aluminum heat sink LED lighting for high bay lights.



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