



人因照明智能路燈系統

Human-Centric Smart Lightening System

產品介紹

- 以「用路人終端需求」為設計發想，採自適應光學系統並研發雙色溫雙光型設計，依路面、天氣狀況等自動切換光型及色溫，降低路面眩光及反光，提升交通安全。
- 交通繁忙階段提供中高色溫，提高駕駛專注力、易辨識遠近。一旦進入深夜或偵測到雨霧氣候，自動切換路燈色溫成低色溫，透過減少視線炫光以確保行車安全及道路照明品質，除了避免昆蟲聚集，也降低對人眼及環境的影響。
- 多傳感器融合技術及反饋機制，實現自動調節色溫、照明強度、覆蓋範圍及照射方向。
- 依經濟部標準局 CNS15233 進行開發，品質符合國家標準，並根據國際自然保育聯盟 IUCN 和國際暗空協會 IDA 規範，搭載低藍光照明技術，預防光害、眩光和天空散射對生態和社區的影響。
- 未來導入 AI 智能運營，提升路燈故障預警、應對氣候變遷等服務，提高城市治理效率，實現道路智能化。
- Adopts an adaptive optical system and develops a dual color temperature and dual light type design. Automatically switches light types and color temperatures based on road surfaces, weather conditions, and other factors, reducing road glare and reflection and improving traffic safety.
- Provides medium and high color temperatures during heavy traffic phases, improving driving concentration and making it easier to distinguish distances and distances. Once late at night or when rain or fog is detected, the street light color temperature is automatically switched to a low color temperature to ensure driving safety and road lighting quality by reducing line of sight glare. In addition to avoiding the gathering of insects, it also reduces the impact on human eyes and the environment.
- Multiple sensor fusion technologies and feedback mechanisms adjust color temperature, illumination intensity, coverage range, and illumination direction.

- Developed according to CNS15233 LED street lamp specifications by the Ministry of Economic Affairs, the system meets national standards, and follows IUCN and IDA regulations featuring low-blue lighting technology to prevent light pollution, glare, and sky scattering damage.
- In the future, AI intelligent operations will be introduced to improve street light failure warnings and climate change adaptation services, increase urban governance efficiency, and achieve Roadway Intellimation.



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團隊資料

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