



CHALLENGE

Design and develop a rugged structure that can hold and operate low power (LPWAN) communications gateways and withstand harsh environmental conditions, therefore can be positioned in remote locations.

SOLUTION

Reece Innovation have developed a robust, efficient structure made from high grade galvanized steel and designed to hold and operate low power (LPWAN) communications gateways such as LoRa and Sigfox powered from solar energy, therefore the gateway can be installed in remote locations where mains power is unavailable.

KEY FEATURES

- 295W high efficiency monocrystalline solar panels;
- Low temperature tolerant, deep cycle, 12V 90Ah (Pb) battery storage for long term operation in dark conditions;
- Holds gateway at height of 3.5m for excellent radio coverage;
- Supplied as kit with the RAK7249 Gateway and also compatible with most Power over Ethernet (PoE) capable gateways: LoRa, Sigfox or Cellular;
- Structure designed to withstand strong winds;
- Separate lockable battery box and IP67 rated electronics enclosure.

SOLAR POD

Whilst wireless gateways for low power data transmission (LPWAN) are readily available on the market, their applications are limited due to their vulnerability to harsh environmental conditions both indoor, e.g. dust, and outdoor, e.g. rain. Further, their installation is dictated by their power requirements meaning that many remote outdoor locations are unable to benefit from using low power protocols such as LoRa and Sigfox. Reece Innovation have designed a bespoke, solar powered pod which allows these gateways to be installed and operated in even the most difficult to access locations.