

## European Solar and Energy Storage Solutions

# Smart power solution Cook Islands



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### LoRaWan connectivity and devices deployed for Smart Islands ...

A LoRaWAN network is being deployed on the Cook Islands in the South Pacific for a range of smart applications. It is a joint collaboration by semiconductors and advanced algorithms supplier Semtech and ICT and internet of things (IoT) solutions provider ICTnexus.

### IQnexus Smart Islands

#IQnexus in collaboration with local IoT provider ICTnexus launch Smart Islands, a LoRaWAN project aimed at transforming the Pacific Islands into a technologically advanced and sustainable community. The IQnexus #LoRaWAN network is the perfect solution for the Cook Islands, where the natural resources and environmental sustainability are the



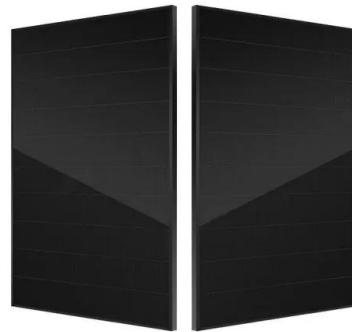
### LoRa Devices and LoRaWAN Standard used in Smart ...

Semtech's LoRa® Devices and the LoRaWAN® Standard Provide Internet of Things Connectivity for ICTnexus Smart Islands Project. Cook Islands to feature a LoRaWAN® network for water and energy management, ...

### Semtech's LoRa® Devices and the LoRaWAN® Standard

## Provide ...

Semtech's LoRa device-to-Cloud platform is a globally adopted long range, low power solution for IoT applications, enabling the rapid development and deployment of ultra-low power, cost



## LoRaWan connectivity and devices deployed for Smart ...

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## Home

Solutions LLP Smart Power Products Ltd. Unit 54, Springfield Commercial Centre, Bagley Lane, Farsley, Leeds LS28 5LY UK. Tel: +44 (0) 113 256 2332 VIEW MAP. Menu. Research & Development; Applications; Technologies; Manufacture; Test; Latest News. LCV2021 - We are on stand C4-307 14th September 2021 - 10:04 am;



## IoT Smart Cook Islands with LoRaWAN

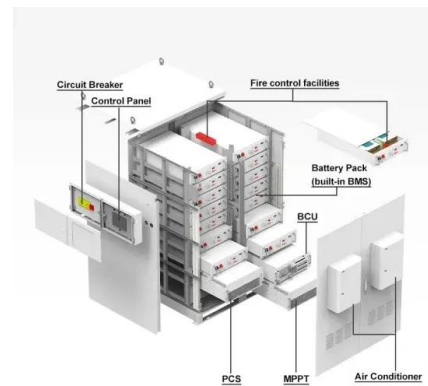
ICTnexus is providing ICT & IoT Solutions for Smart Connected Cook Islands. IoT Monitoring and Energy Management as Software as a Services. Cook Islands is providing IoT connected or wired Power & Energy Meters. For new installations or easy to retrofit. IoT Energy Management combined with Building Automation

Sample Order  
UL/KC/CB/UN38.3/UL



## Controlling smart grids

CE Electric UK envisions real-time thermal ratings (RTTR) as one step towards a fully automated and self-healing smart grid. RTTR solutions determine the thermal state of key power-system components by using thermal-state estimation techniques and physical measurements such as wind speed, wind direction, ambient temperatures, solar gain and



- IP65/IP55 OUTDOOR CABINET
- IP54/55
- OUTDOOR ENERGY STORAGE CABINET
- OUTDOOR BATTERY CABINET

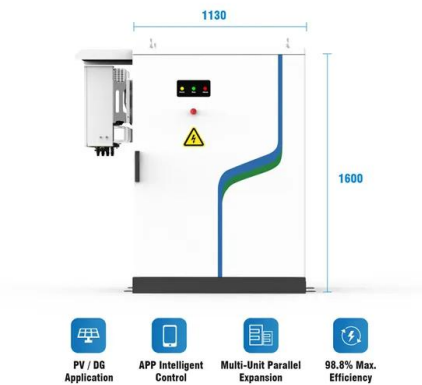
## IoT Smart Cook Islands with LoRaWAN

ICTnexus provides Smart Agriculture Solutions and Services for the Cook Islands and collects data to optimise agricultural operations and generate value from IoT applications with complete flexibility using LoRaWAN® devices and our IoT platform.

## MPLAB® PowerSmart(TM) Development Suite

The MPLAB® PowerSmart(TM) Development Suite is a software suite comprised of multiple selectable components for system definition, system modeling, code generation, control system fine tuning and real-time debugging. We have designed this suite for fully digital control

systems for Switched-Mode Power Supplies (SMPS) that use our dsPIC ® Digital Signal Controllers ...



## Milesight Smart Islands Project in the Cook Islands New Zealand

With LoRaWAN sensors monitoring water level, pipe pressure, CO 2 concentration, temperature and humidity and more, the occupants and facility managers can now enjoy energy-saving operations and contribute to overall sustainability in the Cook Islands.

## A tropical paradise both beautiful and smart

LoRaWAN (long-range wide area network) technology was selected for the Cook Islands' Smart Island project. The low-power protocol uses the unlicensed industrial, scientific, and medical (ISM) frequency band for bi-directional communication. It has a range of 5-7km in rural areas and transmission speeds are up to 27kbit/s.



## Smart grid tech to ensure grid stability in extreme ...

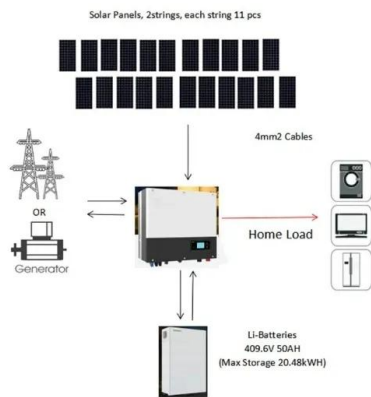
A report published by the UN Office for Disaster Risk Reduction in October 2020 analysed the number and severity of extreme weather events



between 1980 and 2019, and arrived at startling results. A total of 4,212 ...

## Milesight Smart Islands Project in the Cook Islands New Zealand

" Scalability was the key in choosing the right technology to develop the Cook Islands into truly smart islands. As we start with Rarotonga to launch, building IoT infrastructure across 15 islands is no simple task, but the strong capabilities of Semtech's LoRa devices and the LoRaWAN standard provided an ease of deployment and scalability



## About

Smart Billing Solutions. A specialist in the on-charging and recovery of power, water and natural gas costs from tenants or residents. Smart Billing Solutions provides an ideal service for property owners/managers and bodies corporate wanting to step away from the time and expense associated with meter reading, bill creation and debt recovery in multi-tenanted properties.

## LoRa Devices and LoRaWAN Standard used in Smart Islands

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Semtech's LoRa® Devices and the LoRaWAN® Standard Provide Internet of Things Connectivity for ICTnexus Smart Islands Project. Cook Islands to feature a LoRaWAN® network for water and energy management, local street light operation and more



## Smart Grid in Power: Technology Trends

Make better use of smart grid Big Data. Power utilities own or can access huge volumes of data from smart metering systems, synchrophasors, smart homes and other sources of data. In addition, most of the power utilities infrastructure is becoming smarter and has built-in processing, connectivity, and sensing capabilities.

## IoT Smart Cook Islands with LoRaWAN

ICTnexus provides Smart Agriculture Solutions and Services for the Cook Islands and collects data to optimise agricultural operations and generate value from IoT applications with complete flexibility using LoRaWAN® devices and our IoT ...



## How Smart Metering Technology Makes Smart Islands a Reality

The Islands are collaborating with ICTnexus to incorporate Low Power Wide Area Networks (LPWAN), which offer battery-efficient, ubiquitous



wide-area connectivity. LPWAN technology is matched with long-range, low-power IoT-enabled sensors to bring reliable and efficient connectivity and sensing to Cook Islands infrastructure.

## Smart

To advance the South Pacific through innovative and smart technology built around sustainability, his athletic prowess with entrepreneurial insight to drive forward-thinking solutions. Not to mention, he is currently spearheading the development of the first 5-star resort in Rarotonga - The Grand Resort, where Smartie will be integrated



## Semtech's LoRa Devices And The LoRaWAN Standard Provide ...

As part of the ICTnexus Smart Islands project, an IoT platform will feature Semtech's LoRa devices as well as a LoRaWAN network for the Island's infrastructure. Implementing LoRaWAN allows for several smart island use cases including energy metering, water management, air quality and weather stations, street light operation, asset tracking

## Smartie App a digital payment solution

The eagerly-awaited Smartie app, deemed as the Cook Islands' first digital payment solution, was launched on Friday at the Edgewater Resort,

drawing an enthusiastic crowd of businesses, government representatives, and individuals. The event marked a significant step towards modernising financial



## Smart Islands

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## ENERGY PROFILE Cook Islands

Cook Islands COUNTRY INDICATORS AND SDGS  
 TOTAL ENERGY SUPPLY (TES) Total energy supply in 2021  
 Renewable energy supply in 2021  
 93% 0% 7% Oil Gas Nuclear Coal + others  
 Renewables 32% 68% that, if renewable power did not exist, fossil fuels would be used in its place to generate the same amount of power and using the same mix of fossil fuels



## LoRaWAN brings smart connectivity to Cook Islands

The deployment is the first energy management system leveraging LoRaWAN in the Pacific Islands with the long-distance capability of the technology needed to connect all IoT-enabled devices for applications on the island's power grid, utility meters, gas meters, turbidity sensors

for the water treatment plant, water flow and treatment sensors



## Contact Us

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