Tech Data

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Distributed Solar Power Station Monitoring and Management

Battlecard

Solution benefits

- **Centralise:** more reliable monitoring and simpler systems' management.
- **Real-time:** analyse and visualise data in the moment and be notified to issues quicker.
- **Customise:** choose the data that is displayed on the dashboard and reports.
- **Mobile:** enable remote working with complete oversight, whenever and wherever you are.

Solution

Intelligently optimising the power station, Solar Power Management System (SPMS) improves the efficiency of power generation and reduces the cost of operation and maintenance. The integrated tools create a unified maintenance platform for ongoing monitoring and management. While the dashboard collates this data and enables users to analyse and visualise it for deeper insight.

How can Tech Data help?

Tech Data can offer the below services to support your SPMS opportunity:

- **Business Outcome Planning Support**
- **IoT Proof of Value Initiatives**
- **IoT Architecture Definition**
- **Customer App Development**
- **IoT Security and Integration**
- **IoT Hardware/Software Implementation**
- **IoT Managed Services**
- **BI/Analytics Consultancy**
- **Data Integration Services**

Conversation starters

Q How confident are you that your power generation performance is the best it can be? Why?

Q What does your current solar panel maintenance look like? What aspects prove to be most challenging?

Q How do you know when there's a problem with your array? What's the process for fixing it?

Customer challenges

The scope of maintaining a solar array is broad – from fixing electrical faults to cleaning the panels – and it requires the efforts of multiple people, which is a big HR overhead.

Sending people onsite is a costly process. After physically travelling there and investigating the problem, they may need to order a part, which takes time and requires another visit to site.

If there is remote monitoring in place, the challenge is in how to ensure the accuracy of the data. Before considering storage and how to best access that data simply for analysis and reporting.

And the headache inducing complexities of compliance[1] – from regulation (e.g. Electricity Act 1989) to legislation (e.g. Climate Change and Sustainable Energy Act, and Energy Act), and industry codes (e.g. Connection and Use of System Code, Balancing and Settlement Code, and Grid Code).

Target audience

Utilities

Key words to listen for

- **Operational costs are high**
- **Sending people onsite**
- **Analysing data presents a challenge**
- **Communicating data effectively**
- **Bespoke/tailored software**

Supporting vendors

- **Intel® Inside**
- **Advantech**

Sources

1 "Electricity regulation in the UK: overview", Thomas Reuters, https://uk.practicallaw.thomsonreuters.com/1-523-9996?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1