Hughes integrates hiSky's Smartellite™ network to Deliver Satellite Connectivity for Remote Solar Energy Sites in Brazil

Hughes Network Systems integrates the hiSky Smartellite™ network to provide reliable satellite connectivity to 400 autonomous solar energy sites in Brazil's Amazon region. This collaboration aims to facilitate real-time monitoring and control of renewable energy installations, bringing sustainable power to remote communities.

Challenge

Deploying renewable energy solutions in the Amazon presents significant challenges due to its vast, remote, and often inaccessible terrain. Establishing reliable communication networks in such areas is critical for monitoring and managing solar energy installations but is hindered by the lack of existing infrastructure. Traditional communication methods are often unreliable or non-existent, making it difficult to ensure the efficient operation and maintenance of these energy sites.

Solution

To overcome these challenges, hiSky's satellite IoT network, which includes hiSky's HBS modem, Smartellite™ Dynamic 8*8 KU terminals, and hiSky360 NMS, was integrated as an end-to-end solution within the Hughes satellite network.
The Smartellite™ terminal's unique form factor includes a lightweight design, low power consumption, robust performance, and ease of deployment were key elements for providing a solution for the customer. These terminals provide machine-to-machine (M2M) connectivity over Ku band, enabling real-time monitoring and control of the solar energy sites.

Results

The integration of hiSky's satellite communication technology has been pivotal in the successful deployment of solar energy systems in the Amazon.
The hiSky network integrated into the Hughes network for a full end-to-end solution, ensures seamless data transmission between the remote installations and central management systems, facilitating proactive maintenance and efficient operation.
The reliable connectivity ensures continuous monitoring and management of the installations, leading to improved operational efficiency and reduced downtime. This initiative not only provides sustainable energy solutions to remote communities but also sets a precedent for leveraging advanced satellite technology in similar projects worldwide.