



Dryad Networks Selects EchoStar Mobile Satellite IoT Solution for Fire Prevention Service

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Satellite IoT connectivity enables monitoring in remote forest locations

MILTON KEYNES, United Kingdom, Feb. 22, 2024 /PRNewswire/ -- Today, EchoStar Mobile Limited, an EchoStar (Nasdaq: SATS) company, announced that [Dryad Networks](#) has made an initial purchase of 3,000 EM2050 LoRaWAN® modules and related connectivity services. The modules, powered by Semtech's ultra-low power LR1120 device, will provide embedded LoRaWAN satellite IoT capabilities for the Dryad Silvanet Gateways. Dryad's Silvanet Suite of groundbreaking end-to-end wildfire detection technology is already deployed in 25 countries by a wide range of public and private sector organizations.

"Each year, wildfires are responsible for [20% of global CO₂ emissions](#) and cause [\\$140 billion of financial damages](#)," said Carsten Brinkschulte, CEO and Co-founder of Dryad Networks. "Dryad Networks is committed to protecting public and private forests with fire detection and monitoring solutions and the EM2050 module from EchoStar Mobile gives us the features we need to enable large-scale deployments in areas with poor or non-existent terrestrial network coverage. The EM2050 module made sense because of its compliance to LoRaWAN standards, the world's largest IoT ecosystem. The EM2050's latest features, such as Semtech's Long Range - Frequency Hopping Spread Spectrum (LR-FHSS) technology coupled with EchoStar Mobile's powerful satellite IoT communications infrastructure will provide excellent support for Dryad's Silvanet wireless distributed architecture network."

Prior to working with EchoStar Mobile, Dryad relied primarily on terrestrial connectivity with limited support for satellite communications. Integrating the real-time communications and dual mode connectivity of the EM2050 module into the upcoming 3rd generation of Silvanet gateways will make it possible for Dryad to make full-featured use of satellite links, including support for bi-directional communications, device configuration and Firmware Update Over The Air (FUOTA), enabling deployments independently of terrestrial network coverage.

"We are thrilled to power the Silvanet product line with the EM2050 LoRaWAN compatible module," said Telemaco Melia, VP and GM of EchoStar Mobile. "Satellite connectivity is necessary to assure reliable and cost-effective 100% coverage. And the EM2050 module supports multicast and FUOTA, optimizing operations and keeping the Silvanet devices up to date."

"We believe that satellite IoT holds immense potential in delivering significant benefits across various applications, in particular, those targeting environmental protection like Dryad's Silvanet Suite," said Carlo Tinella, Senior Product Marketing Manager at Semtech. "By providing affordable wireless connectivity in remote areas beyond the reach of terrestrial networks, it is possible to expand the digitalization process into vast natural assets, contributing to our planet's sustainable development goals. We are enthusiastic about the outcome of this collaboration with EchoStar Mobile and believe the enablement of satellite technology for IoT leveraging LoRa® and LR-FHSS is just the beginning of a groundbreaking and transformative journey."

About Dryad

Dryad provides ultra-early detection of wildfires as well as health & growth-monitoring of forests through the Silvanet solution – solar-powered gas sensors deployed in a large-scale LoRaWAN mesh network. Dryad aims to reduce unwanted wildfires, which cause up to 20% of global CO₂ emissions and have a devastating impact on biodiversity. By 2030, Dryad aims to prevent 3.9m hectares of forest from burning, preventing 1.7bn tons of CO₂ emissions. To learn more about Dryad, please visit dryad.net.

About Semtech

Semtech Corporation (Nasdaq: SMTC) is a high-performance semiconductor, IoT systems, and cloud connectivity service provider dedicated to delivering high-quality technology solutions that enable a smarter, more connected, and sustainable planet. Our global teams are committed to empowering solution architects and application developers to develop breakthrough products for the infrastructure, industrial and consumer markets. To learn more about Semtech technology, visit us at Semtech.com or follow us on LinkedIn or X. Semtech and the Semtech logo are registered trademarks or service marks of Semtech Corporation or its subsidiaries.

About EchoStar

EchoStar Corporation (Nasdaq: SATS) is a premier provider of technology, networking services, television entertainment and connectivity, offering consumer, enterprise, operator, and government solutions worldwide under its EchoStar®, Boost Mobile®, Boost Infinite, Sling TV, DISH TV, Hughes®, HughesNet®, HughesON™, and JUPITER™ brands. In Europe, EchoStar operates under its EchoStar Mobile Limited subsidiary and in Australia, the company operates as EchoStar Global Australia. For more information, visit www.echostar.com and follow EchoStar on X (Twitter) and LinkedIn.

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