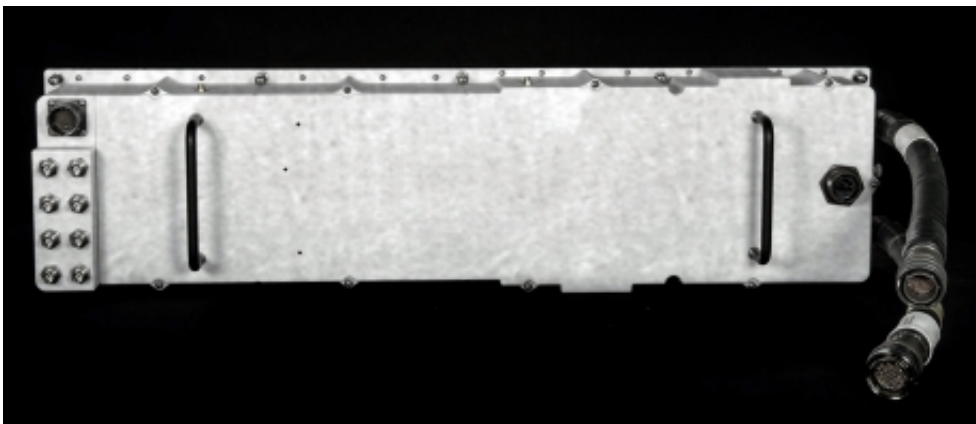


Lockheed Martin introduces next-generation radar technology—Digital Array Row Transceiver (DART)

November 18 2015



Lockheed Martin's new Digital Array Row Transceiver (DART) is a combined transmit and receive LRU with Gallium Nitride (GaN) T/R modules. Credit: Lockheed Martin

Digital Array Row Transceiver (DART) provides greater performance thanks to improved reliability and increased efficiency

After years of investment in state-of-the-art technology, Lockheed Martin announced its next generation radar technology: the Digital Array Row Transceiver (DART).

Based on the use of Gallium Nitride (GaN) technology, DART results in

greater performance within current Lockheed Martin radar products and lowers life-cycle costs due to an increase in energy efficiency. GaN is a low-risk solution whether part of a systems upgrade or in a newly built system.

DART improves upon Lockheed Martin's ground-based radar products that have a proven record of reliability for dozens of customers around the world. This new technology is available in the recently launched TPS-77 Multi Role Radar system and is fully compatible with legacy products (TPS-77, TPS-59, FPS-117) and can help extend a radar's useful life.

"This technology is based in part on feedback we have received from customers with whom we've developed strong partnerships with over decades," says Mark Mekker, Lockheed Martin director, surveillance radar. "We are excited to offer this enhanced technology to all our ground-based radar customers."

In that customer-service spirit, Lockheed Martin unveiled DART at its regular radar users' conference in Orlando, Florida. Representatives from more than 25 countries attended the unique event where they learned from Lockheed Martin experts and shared best practices.

Lockheed Martin has produced and maintains more than 175 surveillance-range radars, all of which are operational around the world detecting targets at ranges up to 250 miles, 24 hours a day. These radars are capable of operating completely unmanned and many have performed for decades in remote, inhospitable areas and in a wide range of operational environments.

No Lockheed Martin FPS-117, TPS-77 or TPS-59 [radar](#) has ever been taken out of service and the systems continue to operate well beyond their original 20-year service lives (many planned to operate for more

than 40 years). This longevity is a direct result of continuous Lockheed Martin investment in state-of-the-art [technology](#) and dedication to customer success.

Provided by Lockheed Martin

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