

# Wi-Fi connectivity will allow Robonaut to move

Digi International

**MINNETONKA, Minn.** – NASA is using [Digi International](#) [1]’s [Connect Core Wi-i.MX53](#) [2] wireless module to Wi-Fi enable its Robonaut, a humanoid-type robot that will perform routine maintenance tasks on the International Space Station (ISS).

NASA’s Robonaut currently exists on the ISS as a torso, bolted to a pedestal, and is connected to the station with wires for power and control. The robot will be upgraded soon with legs and batteries that will allow it to move freely through the station. But that free movement will only be possible if all of the wires are gone – including the ones used for control and monitoring. NASA therefore installed [Digi International](#) [1]’s [Connect Core Wi-i.MX53](#) [2] wireless module to Wi-Fi enable the Robonaut.

Digi International’s wireless module passed a rigorous set of tests to ensure it could survive in outer space. The wireless connectivity provided by the ConnectCore Wi-i.MX53 will help enable the Robonaut to perform routine tasks such as housekeeping and air quality testing in space. This will free up time for astronauts to conduct science experiments and other important tasks.

The ConnectCore Wi-i.MX53 will also allow astronauts to manipulate the Robonaut from anywhere within the ISS or the NASA Mission Control Center on Earth. The wireless link will also transmit views from cameras on the Robonaut, allowing astronauts and NASA control team members to see what the robot is seeing in real-time and control its actions.

The wireless link is part of a plan for further upgrades to Robonaut that will enable it to perform tasks outside of the space station. This could allow Robonaut to assist the crew during Extravehicular Activity (EVA), or spacewalking, tasks including work site setup and serving as an extra set of hands.

For more information about Digi, visit [www.digi.com](http://www.digi.com) [3]. For more information about the ConnectCore Wi-i.MX53, visit [www.digi.com/ccwimx53](http://www.digi.com/ccwimx53) [4]. For more information about the Robonaut, click [here](#). [5]

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### Links:

[1] <http://www.digi.com/>

[2] <http://www.digi.com/products/wireless-wired-embedded-solutions/solutions-on-module/connectcore/connectcore-wi-mx53>

[3] <http://www.digi.com>

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[4] <http://www.digi.com/ccwimx53>

[5] <http://robonaut.jsc.nasa.gov/default.asp>