

# Keysight to Provide Payload Testing Solution for First SWISSto12 HummingSat Mission

10/10/2023

- Solution will validate Ku band bent-pipe transceiver payload that will deliver broadcast services for media companies and broadband connectivity for telecom providers
- Payload test platform helps ensure successful payload mission before satellite leaves launch pad

SANTA ROSA, Calif.--(BUSINESS WIRE)-- **Keysight Technologies, Inc.** (NYSE: KEYS) announces that SWISSto12, one of Europe's fastest growing satellite and radio frequency (RF) payload manufacturers, has selected the **Keysight Payload Test System (PTS)** to validate the RF payloads of its first HummingSat geostationary satellite, Intelsat 45. The HummingSat is a small, innovative telecommunications satellite developed in collaboration with the European Space Agency through a public-private-partnership and customers including Intelsat and Viasat.

Launching a telecommunications satellite has no room for error. Once in orbit, each of a satellite's complex systems and payloads must function flawlessly. This means that satellite manufacturers must thoroughly test each part of a satellite during production and assembly to validate the spacecraft's payload performance before it leaves the launch pad.

Scheduled for launch in 2026, Intelsat 45 will deliver broadcast services for media companies and broadband connectivity for telecom providers through a Ku-band transceiver. The Keysight PTS provides SWISSto12 with a complete integrated set of instrumentation, signal conditioning, and measurement calibration hardware and control software to extensively and robustly test the HummingSat RF payload.

The PTS connects to the HummingSat payload with a modular switch matrix platform that includes switchable CalPod Assembly Modules that provide calibration of the uplink and downlink paths without disconnection. This

feature creates a software movable calibration plane that simplifies the production flow by eliminating interruptions that usually accompany periodic calibrations. In addition, the Keysight CodeOne™ software suite interfaces with the SWISSto12 system controllers to provide automated, accurate, and repeatable measurements for all payload test cycles.

The Keysight PTS uses high-quality test instruments and features a modular construction that is flexible and easy to upgrade. The SWISSto12 PTS configuration includes the **E8257D PSG Analog Signal Generator**, the **M9837A PXIe Vector Network Analyzer**, and the **N9030B PXA Signal Analyzer**.

Emile de Rijk, Chief Executive Officer and Founder, SWISSto12, said: “As part of our effort to optimize and industrialize our assembly and test efforts on HummingSat, we are pleased to announce the selection of recognized testing leader Keysight Technologies and their Payload Test System to validate that our small GEO payload meets all performance parameters essential for a successful mission.”

Greg Patschke, General Manager of Keysight’s Aerospace / Defense and Government Solutions Unit, said: “The complexity of satellites, with their nature as a ‘system of systems,’ makes testing and evaluation a critical aspect of ensuring mission success. Thanks to the Keysight Payload Testing System, SWISSto12 can ensure that the RF payload of the HummingSats they place into geostationary orbit will function as expected for the duration of their missions.”

## About Keysight Technologies

At Keysight (NYSE: KEYS), we inspire and empower innovators to bring world-changing technologies to life. As an S&P 500 company, we’re delivering market-leading design, emulation, and test solutions to help engineers develop and deploy faster, with less risk, throughout the entire product lifecycle. We’re a global innovation partner enabling customers in communications, industrial automation, aerospace and defense, automotive, semiconductor, and general electronics markets to accelerate innovation to connect and secure the world. Learn more at **Keysight Newsroom** and **www.keysight.com**.

## Keysight Media Contacts

Paul Erwin  
Americas/Europe  
+1 248 430 9075  
**paul.erwin@keysight.com**

Fusako Dohi

Asia

+81 42 660-2162

**fusako\_dohi@keysight.com**

Jenny Gallacher

Europe

+44 (0) 7800 737 982

**jenny.gallacher@keysight.com**

Source: Keysight Technologies, Inc.