

# KS8000A

## Test Automation on PathWave

### Deployment System Software

The Keysight KS8000A Test Automation on PathWave Deployment System provides the base set of test sequence features to deploy your manufacturing test solutions. Keysight TAP is a modern Microsoft .NET-based application that can be used stand-alone or in combination with higher-level test executive software environments. TAP is not another programming language. It's a platform upon which you can build your test solutions, maximizing your team's productivity by using your existing software development tools and infrastructure.

KS8000A provides a subset of the KS8400A TAP Developers System's capabilities with no graphical user interface (GUI), Results Viewer, or Timing Analyzer features (see Figure 1). KS8000A can also be deployed in Linux environments, supporting Ubuntu 16.04 (.NET Standard 2.0 compliant).

- Fast execution

TAP's core engine is designed for speed-optimized execution.

- Command line interface

A command line interface (CLI) is provided for integration with other manufacturing applications, as is a full Application Programming Interface (API) to efficiently integrate, add-on and customize with unlimited possibilities.

- Modular “plugin” software architecture

Test steps, instrument/DUT (device under test) interfaces, and result storage are architected as plugins. You can build unique test solutions quickly using the provided plugins.

- Microsoft .NET test step development

TAP makes it easy to implement new test steps and plugins leveraging Microsoft Visual Studio and .NET.

## Key Applications

Test automation for:

- Wireless communication devices and components
- Automotive electronics
- Power electronics
- Digital and photonics devices
- Aerospace and defense systems

## Key Benefits

Keysight TAP is designed to make your test software development simpler, faster and scalable as your needs evolve.

- Simplicity

Why develop your own test sequencer when TAP’s core engine and user interface make it easy for beginning and experienced programmers to quickly develop customized test sequences? Experienced programmers will appreciate TAP’s command line interface and easy integration with a variety of programming languages. Regardless of your programming skill level, you’ll find TAP keeps things simple.

- Scalability

TAP’s modular plugin architecture is centered around a lightweight core sequencing engine. Additional tools and plugins are provided with the KS8400A TAP Developer’s System to help scale your test software to meet your specific requirements – Timing Analyzer, Result Viewer, GUI. Documentation is also provided to help you develop your own plugins that further extend TAP’s capabilities, including interfacing with a wide variety of device handlers, measurement and signal generation hardware.

- Speed

“Speed” can be measured a few different ways — fast test software development, fast test execution and fast test optimization. TAP is designed to speed all three. It’s simple to get up-and-running, and tools like TAP’s Timing Analyzer (provided with the KS8700A and KS800A) help you speed up test plan execution.

## Key Features

KS8000A TAP Deployment System provides a subset of the KS8700A and KS8400A Developer’s System, optimized for fast test execution speed.

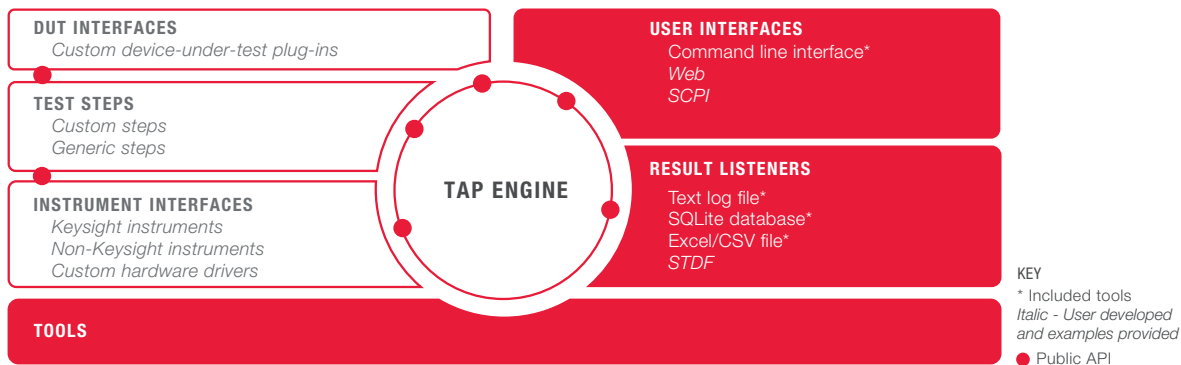


Figure 1. The TAP architecture also includes Application Programming Interfaces (APIs), GUIs, logging and database interfaces. Examples of user-developed plugins include hardware and custom user interfaces.

## Core Sequencing Engine

The Core Sequencing Engine is the “heart” of TAP, designed from its inception for speed-optimized test step execution. Test plans can include simple flow operations such as IF and LOOP. Complex hardware setups and parallel test are also supported.

The TAP Engine (TAP.Engine.dll) is the core component in the software. It includes a plugin manager that finds and handles plugins (test steps, DUT and Instrument interfaces, etc.). It also controls test plan execution (list of test steps) and provides access to functionality offered by the plugins. This covers logging functionality, result handling (database), instrument communication (user-developed hardware drivers, for example). TAP Engine also includes an API for controlling TAP from an external application, such as a 3rd party program, the TAP GUI, or the TAP Command Line Interface (CLI).

# Ordering Information

## KS8000A software licensing

Keysight KS8000A Test Automation on PathWave (TAP) Deployment System is licensed based on the options purchased. Licenses are sold as fixed node-locked to a single PC, transportable and network floating in either perpetual or annual durations.

	Fixed, node-locked (single PC)	Transportable	Network floating (multiple PCs)
Perpetual license	KS8000A-1FP	KS8000A-1TP	KS8000A-1NP
One-year license	KS8000A-1FY	KS8000A-1TY	KS8000A-1NY



### Try the Software Today!

Experience TAP's powerful and flexible test sequence and creation capabilities and optimize your test software development today.

Download the 30-day trial. [www.keysight.com/find/pathwavetest](http://www.keysight.com/find/pathwavetest)

## System and Installation Requirements

### Recommended minimum PC configuration

- Microsoft Windows 7 Service Pack 1: Starter, Home Basic, Home Premium, Professional, Ultimate or Enterprise (32- or 64-bit)
- Microsoft Windows 8 or 8.1: Base, Professional or Enterprise (32- or 64-bit)
- Microsoft Windows 10: Home, Professional, Enterprise or Education (32- or 64-bit)
- Linux: Ubuntu 16.04 (.NET Standard 2.0 compliant)
- At least 1 GB free disk space
- Minimum 1024x768 video monitor

### Prerequisite drivers and software

- Keysight IO Libraries Suite Version 15.0 or above
- Microsoft .NET v3.5 and .NET framework 4.6.2 or .NET Core 2.0

## Related Software

Keysight Command Expert [www.keysight.com/find/commandexpert](http://www.keysight.com/find/commandexpert)

Keysight I/O Libraries [www.keysight.com/find/iosuite](http://www.keysight.com/find/iosuite)

## Premium Support and Consulting Services

Software support subscriptions include access to updates and call center experts during the subscription period. Perpetual licenses must order a one-year support subscription which can be optionally renewed every year. Annual licenses include a support subscription.

Keysight also offers a variety of optional start-up assistance and project consulting services to help you maximize your test development productivity. Contact your Keysight sales specialist or application engineer for more details.

[www.keysight.com/find/services](http://www.keysight.com/find/services)

## More Information

For additional details regarding Keysight's KS8000A Test Automation on PathWave Deployment System, visit: [www.keysight.com/find/pathwavetest](http://www.keysight.com/find/pathwavetest)

Learn more at: [www.keysight.com](http://www.keysight.com)

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at: [www.keysight.com/find/contactus](http://www.keysight.com/find/contactus)

