Keysight Technologies
N6171A MATLAB Software

Industries and Applications

– Aerospace and defense
– Wireless communications
– Education
– Electronic test
– Radar and Wideband Signal Generation and Capture

Product Description

MATLAB is a popular software environment and language used by over 1,000,000 engineers and scientists today. MATLAB is now available for purchase directly from Keysight Technologies, Inc. as your application development environment for PXI and AXIe modular hardware.

Models	
N6171A-M01	MATLAB-Basic package
N6171A-M02	MATLAB-Standard package
N6171A-M03	MATLAB-Advanced package

Main Features and Benefits

Product features	Your benefit
Develop GUI-based applications in MATLAB for your PXI and AXIe hardware	Easily execute repetitive data analysis, verification or test routines
Create arbitrary or standard waveforms mathematically (multi-tones, pulsed radar, multi-carrier, etc.)	Generate the signals necessary to operate your device
Interface to your modular and bench top hardware using GPIB, LAN, USB, VISA, and through IVI or MATLAB drivers	Acquire and analyze your data in a single software environment
Access MATLAB libraries for creating filters and to demodulate signals	Perform the needed data analysis to successfully test or verify your device

MATLAB software extends the capabilities of Keysight modular hardware enabling you to create GUI-based applications, create and apply custom measurement routines, analyze and visualize data, generate arbitrary waveforms, control instruments and build test systems. It provides interactive tools and command-line functions for data analysis tasks such as signal processing, signal modulation, digital filtering and curve fitting.

Three MATLAB configurations are available and range from basic MATLAB capabilities that allow acquisition and analysis of data to full support for signal processing, communications, filter design and automated testing.

KEYSIGHT
TECHNOLOGIES

Software Information

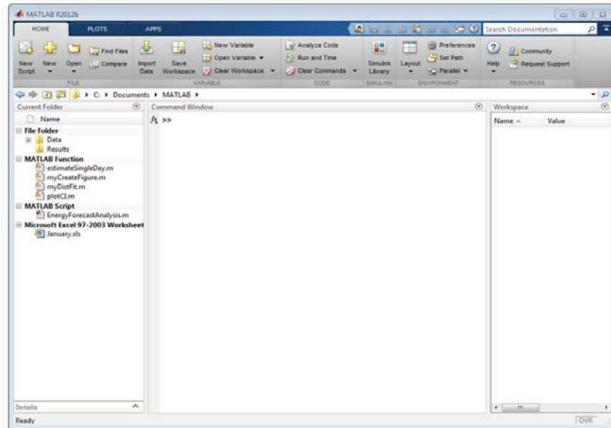| Operating systems	Microsoft Windows
Instrument interfaces	GPIB, LAN, and USB through VISA using Instrument Control Toolbox
Standard compliant drivers	Supports IVI-COM, IVI-C, and MATLAB instrument drivers using Instrument Control Toolbox
Keysight IO Libraries	Includes VISA Libraries, Keysight Connection Expert, IO Monitor

Figure 1. The MATLAB Desktop, Toolstrip and Apps Gallery are designed to enable you to efficiently use MATLAB to create signals, analyze data, and develop GUI-based applications.
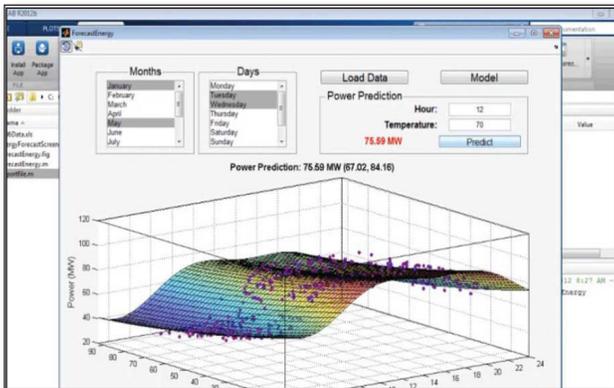

Figure 2. Create your own GUI-based applications in MATLAB, including applications containing 2-D and 3-D visualization. Package up and share these applications as MATLAB Apps for others to install and use.

Ordering Information

Model	Description
M6171A	The MATLAB software option from Keysight: Order the -M01, -M02, or -M03 option
M6171A-M01	Basic configuration includes the MATLAB software environment and Instrument Control Toolbox
M6171A-M02	Standard configuration includes the MATLAB software environment, Instrument Control Toolbox, Communications System Toolbox DSP System Toolbox, and Signal Processing Toolbox
M6171A-M03	Advanced configuration includes the MATLAB software environment, Instrument Control Toolbox, Communications System Toolbox DSP System Toolbox, Signal Processing Toolbox, and RF Toolbox

Keysight Product Links

Product Info:
www.keysight.com/find/matlab

Videos:
www.keysight.com/find/matlab_videos

Request a 30-day Evaluation License:
www.mathworks.com/keysight/trial

www.keysight.com/find/N6171A
www.keysight.com/find/modular
www.keysight.com/find/matlab

USA: (800) 829-4444

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