Keysight E5063A
ENA Series Network Analyzer
100 kHz to 4.5/8.5/18 GHz

Configuration Guide

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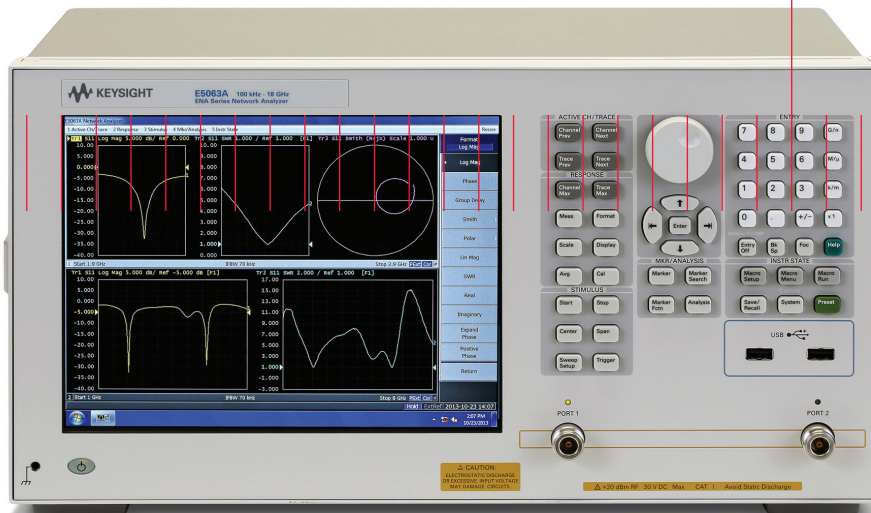
Ordering Guide

The following steps will guide you through configuring your Keysight Technologies' E5063A.

Standard furnished item

Description	Additional Information
Installation guide	Contains the information necessary to start up with the E5063A.
CD ROM IO libraries	
Power Cable	
Calibration of Certification	

Step 1. Choose frequency option (must choose one of the three frequency options.)

Description	Option No.
Network Analyzer 100 kHz to 4.5 GHz, S-parameter test set, 50 Ω system impedance	E5063A-245
Network Analyzer 100 kHz to 8.5 GHz, S-parameter test set, 50 Ω system impedance	E5063A-285
Network Analyzer 100 kHz to 18 GHz, S-parameter test set, 50 Ω system impedance	E5063A-2H5

Step 2. Choose software option (If not required, go to step 3.)

Description	Option No.	Requires	Not Compatible	Additional Information
Time Domain/Test wizard	E5063A-011	None	None	This option is required for time domain analysis or PCB measurements.

Step 3. Choose storage drive option (mandatory option)

Description	Option No.	Requires	Not Compatible	Additional Information
Standard storage drive	E5061B-019	None	None	Option 019 is the only storage drive option for the E5063A. Must choose this option

Step 4. Add accessory option (If not required, go to step 5.)

Description	Option No.	Requires	Not Compatible	Additional Information
Keyboard	E5063A-810	None	None	USB Keyboard for simplifying word inputs.
Mouse	E5063A-820	None	None	USB Mouse for simplifying measurement operation.
Rackmount Kit	E5063A-1CM	None	None	Not installable simultaneously with E5063A -1CP.
Front Handle Kit	E5063A-1CN	None	None	Not installable simultaneously with E5063A -1CP.
Handle/Rack Mount Kit	E5063A-1CP	None	None	Not installable simultaneously with E5063A -1CM or 1CN.

Step 5. Add calibration certificate (If not required, go to step 6.)

Description	Option No.	Additional Information
ISO 17025 Compliant Calibration	E5063A-1A7	ISO 17025 compliant calibration
ANSI Z540 compliant calibration	E5063A-A6J	ANSI Z540 compliant calibration

Step 6. Choose warranty plan

3 year return-to-keysight warranty and service is standard. The extended warranty option is available. Contact your local Keysight office or visit our web site for more information.

Step 7. Add related products

Description	Option No.	Requires	Not Compatible	Additional Information
USB Coaxial Switch, DC to 18 GHz, SPDT	U1810B	None	None	The number of test ports can be expanded up to four by connecting this SPDT switch to the E5063A's port-1 and 2. – For connecting both single-ended and differential probes simultaneously in the PCB measurements with the option E5063A-011. – For testing multiple DUTs with one E5063A.

1. The U1810B's switching can be controlled with the graphical user interface of the option 011 Test Wizard, or with the E5063A's SCPI command. (This command can be used even without the Option 011.)

Hardware Upgrades

Option No.	Description	Upgrade Model No.	Customer Installable	Requires (Instrument must already include the following)	Additional Information
E5063A-285	Upgrade from 4.5 GHz to 8.5 GHz	E5063AU-285	No	E5063A-245	
E5063A-2H5	Upgrade from 4.5 GHz to 18 GHz	E5063AU-2H5	No	E5063A-245	
E5063A-2H5	Upgrade from 8.5 GHz to 18 GHz	E5063AU-2H6	No	E5063A-285	

Software Upgrades

Option No.	Description	Upgrade Model No.	Customer Installable	Requires (Instrument must already include the following)	Additional Information
E5063A-011	Time domain analysis/ Test Wizard	E5063AU-011	Yes	None	Fixed perpetual license

Test Accessories and Calibration Kits

Test accessories and calibration kits that can be used with the E5063A are listed in this section. A complete line of test accessories and calibration kits can be found at the following websites:

http://www.keysight.com/find/na_accessories
http://www.keysight.com/find/accessories

Test accessories

Test accessories such as test port cable are necessary for a complete measurement system using the E5063A. Order test accessories in accordance with the desired measurement system.

Category	Product Number	Description
Cables	N6314A	50 Ω type-N (m) to type-N (m) cable, DC to 12.4 GHz, 61 cm (24 in)
	N6315A	50 Ω type-N (m) to type-N (f) cable, DC to 12.4 GHz, 61 cm (24 in)
	11500E	3.5 mm (m) to 3.5 mm (m) cable, 61 cm (24 in)
	11500F	3.5 mm (m) to 3.5 mm (m) cable, 152 cm (60 in)
Adapters	11853A	50 Ω Type-N accessory kit
	11878A	Type-N to 3.5 mm adapter kit

Calibration kits

Calibration is an accuracy enhancement procedure that effectively reduces the system errors that cause uncertainty in network measurement. Calibration kit is necessary to perform the calibration.

– Mechanical calibration kits include standards, such as opens, shorts and loads, which are measured by the network analyzer. Choose a calibration kit for each connector type to be used.
– Electronic calibration (ECal) modules replace mechanical calibration standards with one solid-state calibration module that is controlled by the network analyzer via USB. ECal modules provide many different impedances to the test ports which enables a full two-port calibration to be performed quickly with a single connection. This technique reduces operator errors and connector wear and abrasion.

Category	Product Number	Description
Mechanical calibration kits	85032F	Standard Mechanical Calibration Kit, DC to 9 GHz, Type-N, 50 Ω
	85054D	Economy Mechanical Calibration Kit, DC to 18 GHz, Type-N, 50 Ω
Electronic calibration kits	85092C	RF ECal: 300 kHz to 9 GHz, 2 ports, Type-N, 50 Ω
	N4431B	Microwave ECal: 9 kHz to 13.5 GHz, 4 ports
	N4432A	Microwave ECal: 300 kHz to 18 GHz, 4 ports
	N4690C	Microwave ECal: 300 kHz to 18 GHz, 2 ports, Type-N, 50 Ω

Literature Resource

Description	Publication Number	Additional Information
E5063A Network Analyzer Data Sheet	5991-3615EN	
E5063A Network Analyzer Brochure	5991-3614EN	
E5063A PCB Analyzer Technical Overview	5991-3617EN	
Network Analyzers Selection Guide	5989-7603EN	

More literature is available on our web site.

Web Resource

Get the latest news, product and support information, application literature and more.
http://www.keysight.com/find/e5063a

myKeysight

www.keysight.com/find/mykeysight
A personalized view into the information most relevant to you.

www.lxistandard.org

LAN eXtensions for Instruments puts the power of Ethernet and the Web inside your test systems. Keysight is a founding member of the LXI consortium.

www.pxisa.org

PCI eXtensions for Instrumentation (PXI) modular instrumentation delivers a rugged, PC-based high-performance measurement and automation system.

Three-Year Warranty

www.keysight.com/find/ThreeYearWarranty
Keysight's commitment to superior product quality and lower total cost of ownership. The only test and measurement company with three-year warranty standard on all instruments, worldwide.

Keysight Assurance Plans

www.keysight.com/find/AssurancePlans
Up to five years of protection and no budgetary surprises to ensure your instruments are operating to specification so you can rely on accurate measurements.

www.keysight.com/quality
Keysight Technologies, Inc.
DEKRA Certified ISO 9001:2008
Quality Management System

Keysight Channel Partners

www.keysight.com/find/channelpartners
Get the best of both worlds: Keysight's measurement expertise and product breadth, combined with channel partner convenience.

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

Americas

Canada	(877) 894 4414
Brazil	55 11 3351 7010
Mexico	001 800 254 2440
United States	(800) 829 4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 112 929
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Other AP Countries	(65) 6375 8100

Europe & Middle East

Austria	0800 001122
Belgium	0800 58580
Finland	0800 523252
France	0805 980333
Germany	0800 6270999
Ireland	1800 832700
Israel	1 809 343051
Italy	800 599100
Luxembourg	+32 800 58580
Netherlands	0800 0233200
Russia	8800 5009286
Spain	0800 000154
Sweden	0200 882255
Switzerland	0800 805353
	Opt. 1 (DE)
	Opt. 2 (FR)
	Opt. 3 (IT)
United Kingdom	0800 0260637

For other unlisted countries:
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