

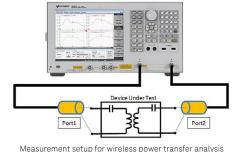


Keysight Technologies

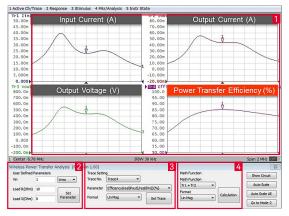
Visualize Wireless Power Transfer Efficiency with the Keysight ENA Series Network Analyzers

Key Features

- Option 006 wireless power transfer analysis software in Keysight E5072A/E5061B/E5063A
- Measurements in real-time
- Arbitrary load impedance defined by users
- Coupling efficiency measurements available
- Advanced 2D/3D simulation

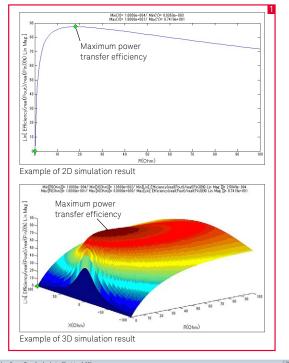


Mode-1: Real-time wireless power transfer analysis



- 1. Measures up to four parameters at the same time
- 2. Arbitrary source voltage and load impedance defined by users
- 3. Parameters selectable for wireless power transfer analysis. Coupling efficiency measurements between coils/resonators available
- 4. Display measurement results with math function

Mode-2: Advanced 2D/3D simulation



wireless Power Transfer Analysis (Revision 1.00)										23	
Sweep Mode 7 Frequency					ep Parameter			3	Trace Parameter	4	
2D:Sweep R (Fix Freq & 4)	Fix	6.78 MHz	-		Fix	Start	Stop	NO	Lin Mag 👻	1 📫	L
2D:Sweep X (Fix Freq & R)		0.701-112		R		0.0001	100	101	Efficiency(real(Pout)/real(Pin))(%)		
3D:Sweep R & X (Fix Freq)	Start	5.78 MHz	-	x		-100	100	101	[Emdency(real/rout)/real	a(Fil))(74)	L
③ 3D:Sweep Freq & R (Fix X)							_		Log-Y	Calculation	L
3D:Sweep Freq & X (Fix R)	Stop	7.78 MHz	-	Vin	1	Vrms	Vrms 💌		Keep Trigger Hold	Go to Mode-1	l

- 1. Simulate power transfer efficiency in 2D/3D
- 2. Flexibility in selecting parameters to sweep
- 3. Set sweep conditions for frequency, R, and X
- 4. Define parameter and format for simulation

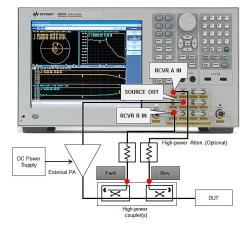




Option 006 wireless power transfer analysis is available in E5072A/E5061B/E5063A ENA series network analyzers. With each model having unique hardware features, ENA series network analyzers offer comprehensive solutions to characterize components in wireless power transfer systems.

High power measurements at device's actual operating conditions with the E5072A

- Configurable test set available to boost output power with an external power amplifier
- The direct accessibility to all of the internal sources and receivers to cancel out the effect of temperature drift from the power amplifier



Example of high power measurement setup with the E5072A



Option 3L5 and 005 in the E5061B enhances product versatility

The best balance between cost and performance with the E5063A

- Affordable solution for volume production
- 100 KHz to 0.5/1.5/3/4.5/6.5/8.5/14/18 GHz with frequency upgradability

Combination analysis with the E5061B

- Option 3L5 LF-RF network analysis provides network analysis capability from 5 Hz to 3 GHz
- Option 005 adds impedance analysis function
- Wireless power transfer analysis, power integrity & impedance measurements in one-box



The E5063A is an affordable solution for wireless power transfer analysis

Price information

Configuration

E5072A 4.5GHz model

E5061B with option 3L5 (5 Hz to 3 GHz) and 005 (impedance analysis)

E5063A 500 MHz model

Option 006 wireless power transfer analysis