

## KLIPPEL R&D SYSTEM - Package Examples

Effective from August 01, 2018. Currency: EURO. All prices net. (VAT, duty, export, import, shipping extra)

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**Examples only. Please check components for your application with the specifications or send a request to KLIPPEL.**

<b>System for Linear Parameter Measurements</b>		
Hardware <sup>1</sup>	Klippel Analyzer 3	6.170 €
Modules	TRF Standard - Transfer Function Measurement <sup>3</sup>	950 €
	LPM - Linear Parameter Measurement	950 €
	<b>total:</b>	<b>8.070 €</b>

<b>Minimal System for Large Signal Woofer Measurements</b>		
Hardware*	Klippel Analyzer 3	6.170 €
Modules	LSI3 Woofer - Large Signal Identification Woofer	5.600 €
	<b>total:</b>	<b>11.770 €</b>
Without laser electrical information available only, no mechanical. The shape of nonlinear curves is exact.		
To have axis calibrated in absolute terms (N/A or mm) LSI3 needs information from the mechanics.		
Importing parameters: Bl(x=0) and/or MMS (moving mass) is recommended.		

<b>Typical System for Woofer + Tweeter Measurements</b>		
Hardware*	Klippel Analyzer 3	6.170 €
Modules	TRF Pro - Transfer Function Meas. + Rub&Buzz <sup>3</sup>	1.950 €
	LPM - Linear Parameter Measurement	950 €
	LSI3 Woofer - Large Signal Identification Woofer	5.600 €
	LSI3 Micro-Speaker - Large Signal Identification Micro-Speaker	5.600 €
	DIS - 3D Distortion Measurement Standard	3.300 €
	TBM - Tone Burst Measurement (CEA2010)	1.900 €
Accessories <sup>4</sup>	Laser Set LK-H052 (all purpose) or Laser Set LK-H082	7.600 €
	Translation Stage	720 €
	Driver Stand	2.660 €
	<b>total:</b>	<b>36.450 €</b>

<b>Typical System for Small Speaker Measurements (Micro Speaker, Multimedia Speaker, Tweeter)</b>		
Hardware <sup>2</sup>	Klippel Analyzer 3 + internal Amp	7.170 €
Modules	TRF Pro - Transfer Function Meas. + Rub&Buzz <sup>3</sup>	1.950 €
	LPM - Linear Parameter Measurement	950 €
	LSI3 Micro-Speaker - Large Signal Identification Micro-Speaker	5.600 €
	DIS - 3D Distortion Measurement Standard	3.300 €
Accessories <sup>4</sup>	Microspeaker Clamping	1.210 €
	Laser Set LK-H052 - all purpose	7.600 €
	Translation Stage	720 €
	<b>total:</b>	<b>28.500 €</b>

<b>Scanning Vibrometer System (minimal)</b>		
Hardware <sup>1</sup>	Klippel Analyzer 3	6.170 €
Modules	TRF Standard - Transfer Function Measurement Standard	950 €
SCN	SCN Vibrometer Set (incl. HW + SW)	27.400 €
Accessories	Laser Set LK-H052 <b>for SCN only</b>	7.100 €
	<b>total:</b>	<b>41.620 €</b>

<b>Typical System for Woofer + Tweeter Measurements with Scanning Vibrometer</b>		
Hardware <sup>1</sup>	Klippel Analyzer 3	6.170 €
Modules	TRF Pro - Transfer Function Meas. + Rub&Buzz	1.950 €
	LPM - Linear Parameter Measurement	950 €
	LSI3 Woofer - Large Signal Identification Woofer	5.600 €
	LSI3 Micro-Speaker - Large Signal Identification Micro-Speaker	5.600 €
	DIS - 3D Distortion Measurement Standard	3.300 €
	TBM - Tone Burst Measurement (CEA2010)	1.900 €
Accessories	Laser LK-H052 Set (for SCN hardware only)	7.100 €
	Laser Sensor Head LK-H082 with mounting parts & 5m cable	4.600 €
	Translation Stage	720 €
	Driver Stand	2.820 €
	Mic 255 IEPE 1/2" Set	990 €
SCN	SCN Vibrometer Set (incl. HW + Software)	27.400 €
SCN optional modules	RMA - Rocking Mode Analysis	3.900 €
	Radiation Area SD	1.050 €
	Sound Power/Directivity	1.050 €
	<b>total:</b>	<b>75.100 €</b>

<b>Typical System for Micro-Speaker with Scanning Vibrometer</b>		
Hardware <sup>2</sup>	Klippel Analyzer 3	7.170 €
Modules	TRF Pro - Transfer Function Meas. + Rub&Buzz	1.950 €
	LPM - Linear Parameter Measurement	950 €
	MMT - Microspeaker Multipoint Tool	2.800 €
	LSI3 Micro-Speaker - Large Signal Identification Micro-Speaker	5.600 €
	DIS - 3D Distortion Measurement Standard	3.300 €
Accessories	Laser LK- H52 Set (for SCN hardware only)	7.100 €
	Vacuum Measurement Kit	2.800 €
	Vacuum Stand	940 €
	Mic 255 IEPE 1/2" Set	990 €
	Mic Gooseneck	63 €
	Mic Clamping Adapter; Swivel Head / Ball Joint	39 €
SCN	SCN Vibrometer Set (incl. HW + Software)	27.400 €
SCN optional modules	RMA - Rocking Mode Analysis	3.900 €
	Radiation Area SD	1.050 €
	Sound Power/Directivity	1.050 €
	<b>total:</b>	<b>67.102 €</b>

<b>Typical Simulation Tools - add-on package for typical systems for Woofer, Tweeter or Micro Speaker Measurements</b>		
Modules	SIM - Simulation <sup>5</sup>	3.570 €
	SIM-AUR - Simulation and Auralization of large signal speaker perform. (with music) <sup>6</sup>	4.300 €
	DIF-AUR - Auralization of defect symptoms based on signal differences	3.800 €
	<b>total:</b>	<b>11.670 €</b>

<sup>1</sup>also required: Computer and Amplifier or Klippel Analyzer 3 with Amp Card: 7.170 €

<sup>2</sup>also required: Computer

<sup>3</sup>Measurement Microphone required

<sup>4</sup>other laser may be required in addition

<sup>5</sup>DIS required

<sup>6</sup> LPM and/or LSI and/or SIM2 required