

## KLIPPEL Analyzer System Package Examples

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

Effective from April 04, 2023. Currency: EURO. All prices net, EXW (tax, duty, transportation, support extra).

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System for Transducer Parameter Measurement (Linear)		
Hardware <sup>1</sup>	Klippel Analyzer 3 (LSX)	7.560 €
Modules	TRF Standard - Transfer Function Measurement <sup>3</sup>	1.140 €
	LPM - Linear Parameter Measurement	1.140 €
total:		<b>9.840 €</b>

Minimal System for Large Signal Woofer Measurement		
Hardware <sup>1</sup>	Klippel Analyzer 3 (LSX)	7.560 €
Modules	LSI3 Woofer - Identification of linear and nonlinear parameters of woofers	6.770 €
	total:	<b>14.330 €</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) are recommended.		

Typical System for Woofer + Tweeter Measurement		
Hardware <sup>1</sup>	Klippel Analyzer 3 (LSX)	7.560 €
Modules	TRF Pro - Transfer Function Measurement + rub & buzz <sup>3</sup>	2.750 €
	LPM - Linear Parameter Measurement	1.140 €
	LSI3 Woofer - Identification of linear and nonlinear parameters of woofers	6.770 €
	LSI3 Micro-Speaker - identification of linear and nonlinear parameters of micro-speakers	6.770 €
	DIS - 3D Distortion Measurement Standard	3.990 €
	MTON - Multi-Tone Measurement	3.300 €
	TBM - Tone Burst Measurement (CEA2010)	2.290 €
	Accessory <sup>4</sup>	Laser Set LK-H052 (all purpose) or Laser Set LK-H082
	Translation stage (incl. Micrometer)	820 €
	Professional Driver Stand	3.890 €
total:		<b>47.530 €</b>

Typical System for Small Speaker Measurement (Micro-Speaker, Multimedia Speaker, Tweeter)		
Hardware <sup>2</sup>	Klippel Analyzer 3 (ALSX) - including internal amplifier	8.560 €
Modules	TRF Pro - Transfer Function Measurement + rub & buzz <sup>3</sup>	2.750 €
	LPM - Linear Parameter Measurement	1.140 €
	LSI3 Micro-Speaker - identification of linear and nonlinear parameters of micro-speakers	6.770 €
	DIS - 3D Distortion Measurement Standard	3.990 €
	MTON - Multi-Tone Measurement	3.300 €
Accessory <sup>4</sup>	Laser Set LK-H052 (all purpose)	8.250 €
	Translation stage (incl. Micrometer)	820 €
	Micro-speaker Clamping	1.550 €
total:		<b>37.130 €</b>

<b>Scanning Vibrometer System (minimal)</b>		
Hardware <sup>1</sup>	Klippel Analyzer 3 (LSX)	7.560 €
Modules	TRF Standard - Transfer Function Measurement	1.140 €
SCN	Multi Scanning Workbench	24.700 €
Software for SCN	Software for Multi-Scanning Workbench - Mechanical Analysis	16.270
Accessory <sup>4</sup>	Laser Set LK-H052 <b>(for SCN only)</b>	7.720 €
	total:	<b>57.390 €</b>

<b>Typical System for Woofer + Tweeter Measurement with Multi-Scanning Workbench</b>		
Hardware <sup>1</sup>	Klippel Analyzer 3 (LSX)	7.560 €
Modules	TRF Pro - Transfer Function Measurement + rub & buzz <sup>3</sup>	2.750 €
	LPM - Linear Parameter Measurement	1.140 €
	MMT - Multipoint Measurement Tool	3.380 €
	LSI3 Woofer - Identification of linear and nonlinear parameters of woofers	6.770 €
	LSI3 Micro-Speaker - Identification of linear and nonlinear parameters of micro-speakers	6.770 €
	DIS - 3D Distortion Measurement Standard	3.990 €
	MTON - Multi-Tone Measurement	3.300 €
	TBM - Tone Burst Measurement (CEA2010)	2.290 €
Accessory <sup>4</sup>	Laser Set LK-H052 (for SCN only)	7.720 €
	Laser Sensor Head LK-H082 (all purpose) (sharing the laser controller of LK-H052)	5.070 €
	Translation stage (incl. Micrometer)	820 €
	Microphone Mic 255 IEPE 1/2" Set	1.100 €
	Professional Driver Stand	3.890 €
SCN	Multi Scanning Workbench	24.700 €
Software for SCN	Software for Multi-Scanning Workbench - Mechanical Analysis	16.270 €
SCN optional modules	RMA - Rocking Mode Analysis	4.710 €
	total:	<b>102.230 €</b>

<b>Typical System for Micro-Speaker Measurement with Scanning Vibrometer</b>		
Hardware <sup>2</sup>	Klippel Analyzer 3 (ALSX) - including internal amplifier	8.560 €
Modules	TRF Pro - Transfer Function Measurement + rub & buzz <sup>3</sup>	2.750 €
	LPM - Linear Parameter Measurement	1.140 €
	MMT - Multipoint Measurement Tool	3.380 €
	LSI3 Micro-Speaker - Identification of linear and nonlinear parameters of micro-speakers	6.770 €
	DIS - 3D Distortion Measurement Standard	3.990 €
	MTON - Multi-Tone Measurement	3.300 €
Accessory <sup>4</sup>	Laser Set LK-H052 (for SCN only)	7.720 €
	Vacuum Measurement Kit	3.290 €
	Vacuum Stand	1.270 €
	Microphone Mic 255 IEPE 1/2" Set	1.100 €
	Mic Gooseneck	70 €
	Mic Clamping Adapter; Swivel Head / Ball Joint	80 €
SCN	Multi Scanning Workbench	24.700 €
Software for SCN	Software for Multi-Scanning Workbench - Mechanical Analysis	16.270 €
SCN optional modules	RMA - Rocking Mode Analysis	4.710 €
	total:	<b>89.100 €</b>

<b>System for Measurement of Balanced Armature Transducer with Scanning Vibrometer</b>			
Hardware <sup>2</sup>	Klippel Analyzer 3 (ALSX) - including internal amplifier	8.560	€
Modules	TRF Pro - Transfer Function Measurement + rub & buzz <sup>3</sup>	2.750	€
	LPM - Linear Parameter Measurement	1.140	€
	BAC - Balanced Armature Check	6.290	€
	DIS - 3D Distortion Measurement Standard	3.990	€
	MTON - Multi-Tone Measurement	3.300	€
Accessory <sup>4</sup>	TFA - Time Frequency Analysis	2.170	€
	Laser Set LK-H052 (for SCN only)	7.720	€
	Vuum Stand (Micro-Speaker fixture on SCN turntable)	1.270	€
	Microphone Mic 255 IEPE 1/2" Set	1.100	€
	Mic Gooseneck	70	€
	Mic Clamping Adapter; Swivel Head / Ball Joint	80	€
SCN	Multi Scanning Workbench	24.700	€
Software for SCN	Software for Multi-Scanning Workbench - Mechanical Analysis	16.270	€
SCN optional modules	RMA - Rocking Mode Analysis	4.710	€
	<b>total:</b>	<b>84.120</b>	<b>€</b>

<b>Typical Simulation Tools - for typical systems for Woofer, Tweeter or Micro Speaker Measurements</b>			
Modules	LSIM - Linear Simulation <sup>5</sup>	3.080	€
	SIM - Simulation <sup>6</sup>	4.310	€
	SIM-AUR - Simulation and Auralization of large signal speaker perform. (with music) <sup>7</sup>	5.200	€
	<b>total:</b>	<b>12.590</b>	<b>€</b>

<sup>1</sup>also required: Computer and Amplifier or Klippel Analyzer 3 with Amp Card: 8.560 €

<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>LPM required

<sup>6</sup>DIS required

<sup>7</sup>LPM and/or LSI and/or SIM2 required