

KLIPPEL MODULE OVERVIEW FOR MOVING PARTS MEASUREMENT



	SPM Lite	SPM Pro	MSPM Lite	MSPM Pro	QC LST Lite	QC LST Pro
R&D System	✓		✓		✓ ⁵⁾	
QC System	-		-		QC Basic or Standard	
Base Module	TRF		TRF	LPM	-	
Analyzer Hardware	Distortion Analyzer 2 Klippel Analyzer 3 ⁵⁾		Distortion Analyzer 2 Klippel Analyzer 3 ⁵⁾		Klippel Analyzer 3 ⁵⁾ QC Production Analyzer	
Test Bench	SPM or LST	SPM	MSPM ⁶⁾		LST, MSPM ⁶⁾ or SPM ⁷⁾	
Laser Sensor (Default) (Measurement Range)	IL-030 (+/- 12.5 mm)	LK-H082 (+/- 18 mm)	LK-H052 (+/- 10 mm)		IL-065 (LK-H052 ⁸⁾) (+/- 10 mm)	
Laser Sensors (Alternative) (Measurement Range)	LK-H022 LK-H052 LK-H082 LK-H152 LK-G32	LK-H052 (+/- 10 mm) LK-H152 (+/- 40 mm)	LK-H022 (+/- 3 mm) LK-H082 (+/- 18 mm) LK-G32 (+/- 5 mm)		LK-H022 LK-H052 LK-H082 LK-H152 LK-G32	
Microphone	✓	-	✓		Opt.	✓
Linear Parameters f_0, Q, k, c, m, r	✓	- (only k_{eff})	✓ (only effective)		✓ (m import, no r)	✓ (m & k relative, no r)
Nonlinear Parameters $K(x), C(x)$	-	✓	-	✓	-	
Mass Import	✓	-	✓		✓	
Added Mass	✓	-	✓	-	-	
DUT \varnothing in mm	30 – 222 ¹⁾ (490 ²⁾)	30 – 222 ¹⁾	< 70		30 – 222 ¹⁾ (490 ²⁾) <70 ⁸⁾	
Frequency Range in Hz	1 – 100 ⁴⁾ (200 ³⁾)	1 – 100	100 - 2500		1 – 100 ⁴⁾ (200 ³⁾) 100 – 2500 ⁸⁾	

1) Standard Ring Set

2) SPM Bench (with custom ring)

3) LST Bench

4) SPM Bench

5) Min. dB-Lab Release 210

6) MSPM Bench requires additional equipment for laser positioning (SCN Vibrometer, LST-Bench or Pro-Stand)

7) For DUTs with $\varnothing \geq 222$ mm / ≤ 490 mm, customized clamping rings required

8) MSPM Bench