Linear Axes — Terminology

This page clarifies the NILAB terminology for linear motion, so that the overlapping terms (**Axis**, **Slide**, **Linear Unit**, **Module**) are not confusing.

The terms at a glance

Term	Meaning	NILAB examples
Linear axis	The complete motion module: drive + guide + carriage + encoder	GDM, LM, RM, MCSS, ULCO, NL-BCJ
Linear axis	A complete axis with an integrated guide and carriage	GDM Tubular Linear Axis, LM Linear Axis, RM Linear Axis, NL-BCJ Eco Linear axis
Linear slide	A compact slide with an integrated drive	MCSS Mini Linear Slides
Linear unit	A modular, often belt-driven, unit	ULCO Belt-driven linear units
Module	A motor module with a carriage and guide	GDM (module version)
Linear motor (bare)	The motor only — needs a guide, carriage, and encoder	NL, GD, GDi, L/LK, NLNS

Why the terms overlap

- **Linear Axis** is used for GDM, LM, RM, and NL-BCJ — all are complete axes with an integrated guide and carriage. - **Slide** is used for MCSS — a compact slide with an integrated drive. - **Linear Unit** is used for ULCO — a modular, belt-driven unit. - **Module** is used for GDM — the motor module version.

The distinction is mainly about **construction and drive type**, not performance:

- **Axis** = integrated guide + carriage (direct-drive motor). - **Slide** = compact, integrated drive (miniature motors). - **Unit** = modular, belt-driven. - **Module** = motor module with carriage.

Related pages

* Linear axes selection * Glossary

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