

Aeros



The AEROS Series represents a significant advancement in metrology, featuring a mechanical design engineered for sustained metrological performance. This series offers long-term measurement data stability, thereby minimizing the frequency and costs associated with maintenance and calibration.

Central to the AEROS design is the utilization of an aluminum alloy for the Z-axis spindle, paired with a proprietary “Single Read” scale system on the X-axis, to ensure precision and reliability.

Technical Highlights

The Y-axis employs a cross-beam constructed from light aluminum alloy, designed for maximum rigidity with minimal mass, optimizing movement efficiency.

A multi-sensor system automatically compensates for errors attributed to thermal expansion of the machine’s structural components, maintaining accuracy under variable temperature conditions.

An optional “Dual Read” scale system can be implemented on both X-axis beams to enhance metrological performance further.

The design of the X-axis beams focuses on controlled expansion, contributing to the machine’s consistent accuracy.

Optical scales feature a high-resolution expansion system ($0.1\mu\text{m}$), designed for precision.

Comprehensive protective measures, including covers and bellows for the main mobile structure (X / Y axes), are available to safeguard the machine’s integrity.

Specification

The AEROS CMMs Series is offered in 22 standard models, accommodating various measurement requirements with YZ-axes sections: 20.10 / 20.15 / 25.15 / 25.18. These models deliver accuracy starting from $4.3+4.0\text{L}/1000$, with operational speeds up to 500 mm/sec and acceleration capabilities reaching 1200 mm/sec^2 .