

# Talos L120C

Proven performance, ready for the future

The Talos<sup>™</sup> L120C provides proven, optimal imaging performance on a platform designed for modular versatility, maximum stability, and operational ease.

Discover the next generation 120kV imaging platform. Key features of the Talos L120C include modular design and improved optical stability, yielding unmatched ease of use, productivity, operational comfort, and uptime. Talos L120C is an ideal solution for entry level cryo-studies, simple point and click imaging, and a highly efficient instrument for tomography and single particle analysis sample screening with standalone options for EDS and STEM.

In line with FEI's Talos F200 TEM and Titan<sup>™</sup> platforms, Talos L120C offers enhancements in automation, vacuum, and optical stability. This is important for experiments in 2D imaging, 3D tomography—at room temperature and cryo-conditions—and adds a key screening element in the single particle analysis workflow.

## Versatile detectors

The Talos L12OC is an intuitive S/TEM system, which includes the FEI-designed CETA 16MP camera, and is available with the new digital search-and-view SmartCam<sup>™</sup> camera. This allows users to remotely operate the microscope from within the microscope room or from an adjacent room.

#### **Advanced Automation**

The Talos L12OC features easy-to-use software, operating on Windows<sup>®</sup> 7, which allows for switching between TEM and STEM mode quickly and offers a high level of automation and complete digital control over multiple microscope components including the electron gun, optical elements, vacuum system, and stage. Additionally, the user interface allows for smart presets to save multiple operational conditions across many different applications.

# **KEY BENEFITS**

**More stability.** Robust system enclosure, constant power lenses, and remote operation allow consistent use.

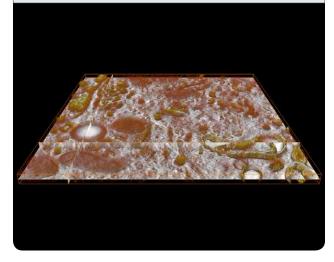
**Automation.** Multiple auto-functions (auto-gun, autoalignment) improve repeatability and reproducibility of results.

**High-quality imaging.** 4k × 4K Ceta CMOS camera provides a large field-of-view and live digital zooming with high sensitivity and high speed.

Quick sample exchange. Robust vacuum system provides a contamination-free environment and fast recovery after airlock.

**Correlate data.** FEI MAPS software allows for automated and unattended large area acquisition at multiple scales.

**Cryo-imaging.** Observe cryo-specimen with minimal ice growth and automate single particle analysis imaging with FEI EPU software.



↑ Room temp tomogram of a 200nm section of human macrophages (5nm gold beads internalized into endosomes, plasma membrane stained with electron dense ruthenium red)



### MAPS on TEM

The modular MAPS software platform allows for automated and unattended large area acquisition at multiple scales and provides a single software solution for image and data transfer between multiple imaging platforms such as TEM, SEM, SDB, and light microscopes. Users can quickly and easily correlate data from multiple imaging platforms ready for input into the optional Amira® software for advanced visualization and analysis.

## **Ready for the Future**

With potential to address multiple applications, the Talos L120C is a powerful entry level solution for imaging and tomography, and can be configured as a basic Cryo-TEM imaging platform. Whether your needs are in cryo- or room temperature, or you require optimal 2D imaging or 3D imaging and multi-modality imaging experiments, the Talos L120C is the ideal platform. It is fully upgradeable and can expand as your research needs and ambitions grow.

KEY SPECIFICATIONS	
TEM Line Resolution	< 0.2 nm
TEM Point Resolution	< 0.37 nm
TEM Magnification Range	25-650×
TEM Magnification Range with Camera	35-910×
Alpha Tilt Angle (with standard holders)	-90° to +90°
STEM HAADF Resolution with LaB6 (nm)	< 1.0
STEM Magnification Range	200-2.2M×

Discover more with FEI. Contact your account manager or visit FEI.com to learn more about the FEI Talos L120C and how we can help enhance your life sciences research.

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