

Introducing the CellInsight CX7 LZR Pro HCS Platform

Cell analysis

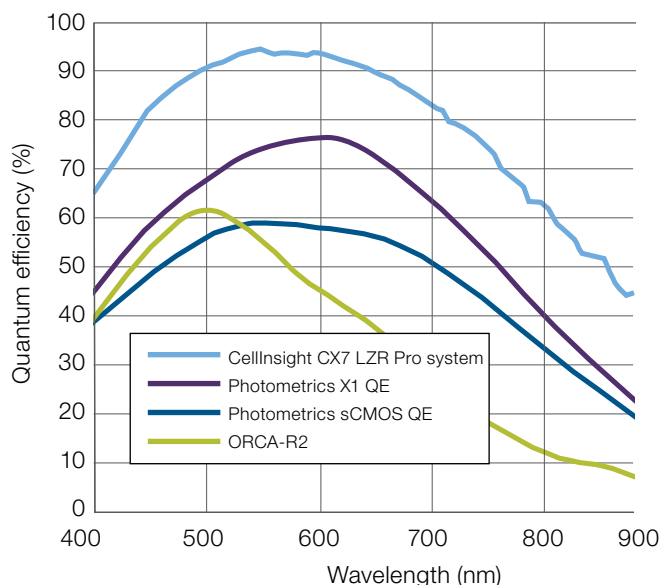
Superior high-content screening performance for lightning-fast discovery

The Thermo Scientific™ CellInsight™ CX7 LZR Pro High-Content Screening (HCS) Platform uses advanced screening technologies to deliver superior performance, enabling lightning-fast drug discovery. This powerful new HCS platform incorporates many advances, including:

- A next-generation, back-side illuminated (BSI) sCMOS camera with near-perfect quantum efficiency (QE)
- Olympus™ X-line objectives that further improve image quality and screening performance
- Laser-based illumination with seven independent lasers for high performance in speed and multiparameter analysis
- Near-IR (785 nm) laser excitation that expands multiplexing capabilities including novel cell-painting design
- Dual pinhole Nipkow spinning disc confocal technology that creates publication-quality images
- Compatible with 96- to 1,536-well plates, slides, U-bottom plates for 3D spheroid biology, hanging drop plate, and even microfluidic plates

The next-generation BSI sCMOS camera in the CellInsight CX7 LZR Pro platform offers:

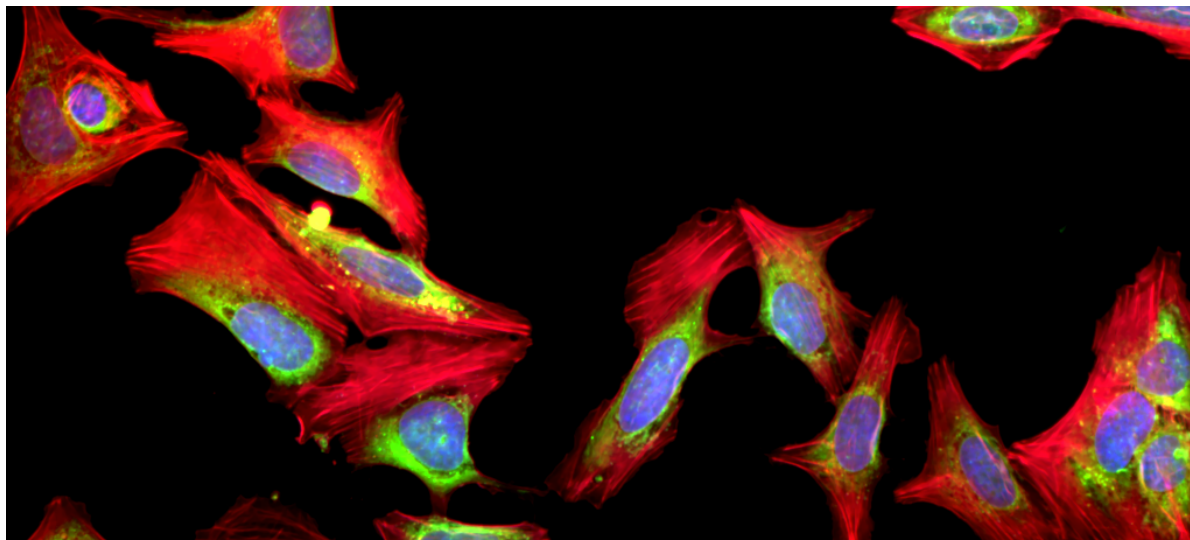
- An amazing QE of 95%
- Up to 16 bits of grayscale imaging data for maximal dynamic range performance



Comparison of camera QEs across wavelengths between 400 and 800 nm. The CellInsight platform's new sCMOS camera achieves a QE of 95%.

- Advanced -20°C cooling to minimize background noise variability
- Enablement of new assay types like the Abcam™ FirePlex™ HT Immunoassay

Enable professional-quality cell painting with the CellInsight CX7 LZR PRO HCS Platform



Cell painting multiparameter phenotyping using the CellInsight CX7 LZR Pro HCS Platform and the Invitrogen™ Image-iT™ Cell Painting Kit. U2OS cells were labeled with Thermo Scientific™ Hoechst 33342 Solution; Invitrogen™ Concanavalin A, Alexa Fluor™ 488 Conjugate; Invitrogen™ SYTO™ 14 Green Fluorescent Nucleic Acid Stain; Invitrogen™ Wheat Germ Agglutinin, Alexa Fluor™ 555 Conjugate; Invitrogen™ Alexa Fluor™ 568 Phalloidin; and Invitrogen™ MitoTracker™ Deep Red FM Dye. After cell painting staining, images were acquired with the CellInsight CX7 LZR Pro HCS Platform using the 20X 0.8NA X-line objective lens and analyzed using the cell painting bioapplication in Thermo Scientific™ HCS Studio 5.0 Cell Analysis Software.

Laser-based autofocus and the new powerful sCMOS camera boost your experiment's assay window and reduce exposure time, providing amazing acquisition speed. Assay speed is further enhanced with true on-the-fly phenotyping that collapses analysis and image capture into one parallel stream, allowing you to get to your data faster. Additionally, the new Thermo Scientific™ Image-iT™ Cell Painting Kit has been codeveloped with the CellInsight CX7 LZR Pro platform to enable turnkey multiparameter labeling, imaging, and analysis.

All these advanced features—paired with a dedicated, all-new, cell-painting bio-application in Thermo Scientific™ HCS Studio™ Software and optional Thermo Scientific™ Amira™ Software allow the CellInsight CX7 LZR Pro HCS Platform to simplify your most challenging assays, such as cell painting, morphological tracing in 3D, and immune cell to tumor colocalizations. Find out how you can accelerate your research with the new CellInsight CX7 LZR Pro HCS Platform today.

Please contact your sales representative for more information:

Learn more at thermofisher.com/hcs

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