

# The HT7800 Series of Transmission Electron Microscopes

Hitachi has developed the “HT7800 series” of transmission electron microscopes to be user-friendly instruments that facilitate analysis in a wide range of fields, from biomedical research to soft materials science. The product lineup includes the “HT7800”, which offers a wide field of view and high-contrast observations, and the “HT7830”, which achieves an on-axis lattice resolution of 0.19 nm. These instruments are possible to be used with accelerating voltages from 20 to 120 kV, and retain the operating environment of previous models, which allows to be operated in a bright room. In addition to centralized TEM operation using a single monitor, we have added new image-navigation features, supporting capabilities such as field-of-view searching and routine imaging. Furthermore, the instruments are equipped with advanced features as standard such as; Auto-multiple frame capture and panoramic function which is developed by Hitachi and Auto continuous tilting image capturing function of 3D Tomography\*, and others.

\*Only available on the HT7800.

	HT7800	HT7830
Electron source	W or LaB <sub>6</sub>	LaB <sub>6</sub>
Accelerating voltage	20-120 kV	
Lattice resolution	0.20 nm (Off-axis, 100 kV)	0.19 nm (On-axis, 120 kV)
Maximum magnification	×600,000	×1,000,000
Maximum tilt angle	±70°	±10°



with option