

Rosel holding, which is part of the Rostec State Corporation, began serial production of computing complexes with liquid cooling for the operation of powerful neural networks. The new solution allows you to reduce the size of data processing centers by 3-5 times compared to traditional systems.

The technology is based on immersion of equipment into a special dielectric, which effectively removes heat without interfering with electronics. The liquid used is not toxic, non-combustible and biodegradable, which makes the system more environmentally friendly compared to freon cooling.

According to developers, liquid cooling consumes 30-50% less energy than air analogues. This is especially important for modern processors and video cards used in neural networks and supercomputers. Additional advantages include protection of equipment from dust, corrosion and temperature changes, which increases the life of the components.

Russian technology allows you to create compact centers for machine learning and reduces dependence on foreign solutions. Rosel notes that such developments are actively developing only the United States and China.