







Triangulum is a 3-qubit desktop NMR quantum computer newly launched by SpinQ. It provides a comprehensive solution for quantum computing education.



Product highlights

- The product runs stably at room temperature with high cost performance and almost zero cost;
- Customized quantum algorithm circuit designing and programming are supported on Triangulum;
- Hardware-level pulse designing and engineering are available;
- The product is a true quantum computer based on NMR system, not a quantum simulator;
- The product runs independently with intuitive operation, and the quantum computing resource is controllable with no waiting.





SpinQuasar

SpinQuasar is the software on Triangulum for quantum computing education as well as customized quantum computing implementation.

- The product supports the access to quantum computing hardware on multiple terminals through network.
- The product can execute 3-qubit complex quantum algorithms (Quantum Fourier transform, Grover search algorithm, quantum addition and subtraction).
- The product provides an interface library to support developers to access quantum computing functions through a programming interface.
- Rich and complete quantum gate operations with high fidelity.







Shenzhen SpinQ Technology Co.,Ltd.





Specifications:

	Qubits		3
Measurement	Coherence Time	T1	15s
		T2	400ms
	Single-Qubit Gate Fidelity		0.99
	Multi-Qubit Gate Fidelity		0.97
and Control	Single-Qubit Gate Operation		~40
System of Qubits	Multi-Qubit Gate Operation		~10
	NMR-Frequency(-H / -P / -F)		$36.0\pm1\mathrm{MHz}$ / - / $33.9\pm1\mathrm{MHz}$
	Pulse Resolution		10ns
	90° Pulse Width		~10us
	Phase Resolution		0.01°
	Spectral Resolution (H Frequency)		~36Hz/1.0ppm
Magnet	Magnet Type		NdFeB permanent magnet
	Magnetic Density		0.85Tesla ±5%
	Stray Field		<0.5m
	Magnet Operation Temperature Range		0~40°C
Operating Software and Function	Operating System		windows 10
	Operating Method		Peripheral
	Built-in Introduction of Quantum Computing		Yes
	Number of Built-in Demostration Algorithms		24
	Spin Dynamics Experiments		Support some experiments
	Experimental Demonstration		>18
	Custom Quantum Circuit Function		Yes
	Auto Calibration		Yes
	Support SpinQit (Quantum Programming Framework)		Yes
	Multi-User Operation		Yes
	Support local Storage		Yes
HardWare	Mains Power Rating		100~240V AC; 50/60Hz; Single Phase
	Power Dissipation		60W
	Size(H*W*D)		610*330*560mm
	Weight		44Kg

