

## Quantinuum H-Series Product Change Notification

<b>Title of Change:</b>	<b>H1-2 upgrade to 20 qubits</b>
<b>Date of Change:</b>	July 17th, 2023
<b>Contact Information:</b>	<a href="mailto:QCSupport@quantinuum.com">QCSupport@quantinuum.com</a>
<b>Products Impacted:</b>	H1-2 quantum computer and H1-2 emulator
<b>Changes to Product Data Sheet:</b>	<b>NO</b> <input type="checkbox"/> <b>YES</b> <input checked="" type="checkbox"/>
<b>Changes to Subscription Contract:</b>	<b>NO</b> <input checked="" type="checkbox"/> <b>YES</b> <input type="checkbox"/>
<b>Changes to Interface:</b>	<b>All</b> <input checked="" type="checkbox"/> <b>Quantinuum API</b> <input type="checkbox"/> <b>Microsoft</b> <input type="checkbox"/>
<b>Description and Purpose:</b>	<p>The purpose of this notification is to:</p> <ol style="list-style-type: none"> <li>1) Notify customers that the H1-2 quantum computer has been upgraded to N=20 qubits.</li> <li>2) The H1-2 emulator has been upgraded to use the N=20 compiler and the error coefficients will be updated to values representative of H1-2 performance.</li> </ol> <p>See additional information below for more details.</p>
<b>Reason / Motivation for Change:</b>	N=20 upgrade to H1-2 quantum computer
<b>Action Required by Customers:</b>	None

### Additional Information:

#### **1) Notification of H1-2 quantum computer upgrade to N=20 qubits**

Going forward the H1-2 quantum computer (target: H1-2) will be available with 5 parallel gate zones and can support up to 20 qubits.

Prior to commercial availability the Quantinuum System Model H1 Product Data Sheet will be updated to reflect the H1-2 specifications, including typical, minimum, and maximum performance parameters. The updated Product Data Sheet will be posted [\[here\]](#) and on the user portal.

#### **2) Notification of H1-2 emulator update to reflect H1-2 upgrade**

The H1-2 emulator will receive an update to reflect N=20 qubits available on the H1-2 quantum computer. In addition, the error parameters in the Quantinuum System Model H1 Emulator Product Data Sheet will be updated to reflect the current state of the H1-2 quantum computer. The updated Emulator Product Data Sheet will be posted [\[here\]](#) and on the user portal.

In summary, the impact to customers of launching the 20-qubit H1-2 quantum computer is:

- H1-2 has been upgraded to 5 parallel gate zones with 20 qubits.
- The H1-2 Emulator will be updated to reflect the changes on the H1-2 quantum computer.
- The Quantinuum System Model H1 Product Data Sheet and Emulator product data sheet will be updated to reflect the H1-2 specifications, including typical, minimum, and maximum performance parameters.

Access to the H1-2 N=20 quantum computer is included in your current access and availability will be communicated via the operations calendar.