

HiSeq® 4000 Upgrade Frequently Asked Questions

General

1. How does the HiSeq 3000 differ from the HiSeq 4000?

HiSeq 3000 is a single flow cell system built using the same core architecture and technology as the HiSeq 4000. It uses the same dual surface imaging and has all of the same ease of use features as HiSeq 4000, but is a single flow cell system. The HiSeq 4000 is a dual flow cell system, which allows sequencing of a single flow cell or 2 flow cells concurrently.

2. What changes are included in this upgrade?

This upgrade includes hardware changes to upgrade the single flow cell HiSeq 3000 system to a dual flow cell HiSeq 4000 system. The upgrade package includes an upgrade of the current HiSeq 3000 service contract to the equivalent HiSeq 4000 service contract with the same expiration date for up to 12 months from the date of the upgrade.

3. What is the catalog number for the upgrade package?

The catalog number for the HiSeq 3000 to HiSeq 4000 Upgrade is SY-401-4002.

4. Does an upgraded HiSeq 3000 perform the same as a HiSeq 4000?

Yes, an upgraded HiSeq 3000 performs to the same specifications as a factory built HiSeq 4000.

Reagents and Flow Cells

5. Are the reagent kits and flow cells different?

No, chemistry is the same for the both instruments. Reagents and patterned flow cells provided in the HiSeq 3000/4000 SBS Kit and the HiSeq 3000/4000 Cluster Kits are designed and optimized for both the HiSeq 4000 and HiSeq 3000 systems.

Software

6. Is the software different?

No. Both instruments use HiSeq Control Software v3.3 and Real-Time Analysis v2.3, or later.

Site Prep

7. How long does an upgrade take?

An upgrade takes about 2 days. You can perform a run on flow cell A as soon as the FSE completes the hardware upgrade and leaves the site. Wait for validation to complete

before starting a run on flow cell B. For instructions on setting up staggered runs, see the [HiSeq 4000 System Guide \(document # 15066496\)](#).

8. How can I prepare for my upgrade?

Preparing your lab for the upgrade before an Illumina representative arrives helps to make sure that the upgrade goes smoothly.

- Perform a maintenance wash and ensure that the instrument is idle at the time of your upgrade. For idling and washing instructions, see the [HiSeq 3000 System Guide \(document # 15066493\)](#).
- Network requirements are the same for the HiSeq 4000 and HiSeq 3000. For information, see the [HiSeq 4000 and HiSeq 3000 Systems Site Prep Guide](#).
- If temporary storage is required, please arrange space to accommodate the HiSeq upgrade crate.

Dimension	Measurement
Width	83 cm (32.5 in)
Height	72 cm (28.25 in)
Depth	104 cm (41 in)
Weight	~30 kg (~66 lbs)

9. Do I need to revalidate my instrument after it is upgraded?

After Illumina upgrades the system, we will perform a full operational test of all system components, including a validation sequencing run. The upgrade validation uses a PhiX control library for a 2 x 100 sequencing run. If you have a CLIA lab process or other institutional needs that require system revalidation, consider designing a validation plan that is specific to your needs.

Logistics

10. When can I expect my upgrade and how will I be notified of the schedule?

Illumina will communicate a date for your upgrade upon confirmation of the sales order. One week before the upgrade, your Field Service Representative will call to confirm the onsite arrival time and provide instructions for preparing your HiSeq 3000 for the upgrade.

If during any of the communications you realize the upgrade cannot occur at the scheduled time, please contact Customer Service at instrumentservice@illumina.com to reschedule your upgrade.

11. What happens if I cannot make my instrument available when Illumina can upgrade it?

Illumina will make every effort to reschedule you in subsequent weeks but cannot guarantee the availability of a Field Service Representative to perform the upgrade on a specific date.