

## BioXp™ 3250 system

The BioXp™ 3250 system is an automated synthetic biology workstation for building DNA clones, variant libraries, genes, genomes, and RNA constructs, providing scientists a simple, fast, and secure method for performing biomolecular synthesis and assembly.

### Unique BioXp™ 3250 system characteristics

- Build genes, genomes, clones, and DNA variant libraries on the same platform without additional user optimization or programming
- Generate up to 32 high-quality individual dsDNA fragments in under 24 hours, using a standard 96-well plate
- Generate up to 10 µg of DNA for cloned *de novo* synthesized fragments, ranging in size from 300 to 7,000 base pairs
- Uses off-the-shelf or custom vectors
- Optimized, validated, and supported for use with unique Codex DNA reagent master mixes, used in over 4,000 peer-reviewed publications
- Performs a proprietary two-step error correction process, resulting in error rates of 1:10,000 to 1:30,000
- Automates cloning into user-specified or off-the-shelf vectors using the Gibson Assembly® method
- Automatically scans barcodes from reagent modules to download job-specific, pre-validated scripts directly to the instrument for hands-free operation
- Available with IQ/OQ/PQ service and documentation
- Locally controlled via onboard software without the need for a separate standalone computer
- Fully integrated onboard thermocycler used in both isothermal and temperature gradient applications
- Simplified user experience comprised of the following four steps:
  1. Submit sequences to Codex DNA
  2. Receive project reagents and consumables in under five business days (international shipping times may vary)
  3. Load labware into the instrument
  4. Initiate run with a single push-button start



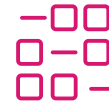
#### Build genes

Custom high-fidelity gene fragments



#### Build clones

Custom DNA fragments, up to 7,000 bp, cloned into any vector



#### Build libraries

Custom variant DNA libraries

## BioXp™ 3250 system specifications

The BioXp™ 3250 system is an automated synthetic biology workstation for building gene fragments, clones, and libraries.

|   |  |
|---|--|
| <b>Product name</b>                         | BioXp™ 3250 system   |
| <b>Catalog number</b>                       | BX3250-01  |
| <b>Description</b>                          | Automated synthetic biology workstation  |
| <b>Power input voltage</b>                  | 100–240V   |
| <b>Power input current</b>                  | 8.3 A max  |
| <b>Operating temperature range</b>          | 16 to 40 °C  |
| <b>Storage temperature range</b>            | –18 to 60 °C   |
| <b>Operating and storage humidity range</b> | 10 to 90% (non-condensing relative humidity)   |
| <b>Operating altitude</b>                   | Up to 2,000 m  |
| <b>Water ingress</b>                        | Non-immersion; protection for damp wipe only   |
| <b>Safety and regulatory standards</b>      | IEC 61010-1:2010 3 <sup>rd</sup> edition, EN 61010-1:2010, UL, CSA                             |
| <b>Electromagnetic compatibility</b>        | IEC 61326-1:2012; EN 61326-1:2013<br>KN 61000-6-4: 2015 and KN 6100-6-2: 2015, AUS/NZ CISPR 11 |
| <b>MTBF</b>                                 | > 500 process runs   |
| <b>Weight</b>                               | 63.4 kg [139.8 US lbs]   |
| <b>Dimensions (W × D × H)</b>               | 69 × 77 × 53 cm [27 × 30 × 21 in]  |

## BioXp™ application specifications

The BioXp™ 3250 system supports applications ranging from building, cloning, and amplifying gene fragments to constructing DNA variant libraries.

|                            |   |
|----------------------------|---|
| <b>Number of fragments</b> | 32  |
| <b>Format</b>              | 96-well plate                                 |
| <b>Assembly runtimes</b>   | 6 to 21 hours; variable, based on application |
| <b>Fragment sizes</b>      | 300–7,000 base pairs                          |
| <b>Yields</b>              | 200 ng–10 µg                                  |
| <b>Error rates</b>         | 1:10,000–30,000                               |

Specifications are subject to change.