Applied Biosystems 3730 DNA Analyzer

Specifications

Run Module	Capillary Length to Detector (cm)	Runs/Day	LOR*	Phred Q_{20} Bases/Read	Phred Q_{20} Bases/Day
Rapid	36	40	550	500	960,000
Standard	36	24	700	650	748,8000
Long Read	50	12	> 1,000	> 870	> 460,800

* 98.5% basecalling accuracy, less than 2% N's, using pGEM-3Zf(+) as template.

Production Capacity: Fragment Analysis

Linkage mapping applications with Applied Biosystems LMS v 2.5 Kit (customized PET™ oligos for 5-dye analysis)

Dye Set	Capillary Separation Distance (cm)	Runs/Day	Samples/Day	Genotypes/Day
G5	36	40	1,920	38,400*

*Assumes 20 Genotypes per sample

Capillary Arrays and Separation Matrix

Capillary Separation Distance (cm)	Dimensions	Polymer consumed/run
36	150 µm o.d./50 µm i.d.	Approx. 100 µL
50	150 µm o.d./50 µm i.d.	Approx. 125 µL

Reagents
- BigDye® Terminator v 1.1
- BigDye® Terminator v 3.0
- BigDye® Terminator v 3.1
- Linkage Mapping Sets v 2.5

Instrument configuration
- CE Instrument
- Computer and Flat Panel Monitor
- Installation Chemistry and Accessories
- Collection and Analysis Software

Computer Specifications
- Base Unit: Pentium® IV Processor 2.00 GHz/400 MHz
- Memory: 1 GB, PC 800 @ 400 MHz
- Hard Drive: 72 GB
- Operating System: Windows® 2000 Professional Edition
- Monitor: 17" Flat Panel
- DVD-ROM Drive

Integrated Plate Stacker
- Houses 16 sample plates at any time
- Accommodates 96-well and 384-well plates
- Accessible any time except when autosampler is moving

Sample Volumes
- For 384-Well Sample Plates: 5-30 µL
- For 96-Well Sample Plates: 10-50 µL

Plate Seal
- Septa
- Polypropylene heat seal (automatic onboard piercing)

Laser

Argon-ion multi-line, single mode laser: primary excitation lines 488 and 514.5 nm.

Operating Environment
- Ambient temperature: 18˚C to 30˚C
- Humidity: 20 to 80% (non-condensing)

Oven Temperature

Active temperature control between 18˚C to 70˚C

Electrical
- Main Power: 200-220 V or 230-240 V+/-10%, 50/60 Hz
- Power Rating: Maximum input of 2500 VA
- Circuit Current:Maximum of 15 amps. The instrument requires a 30 amp receptacle to match one of the two power cord configurations that ship with the system. The electrical receptacle must be located within 3 m (10 ft.) of the back