


Spectrum

COMPACT
CE SYSTEM





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The Spectrum Compact CE System is an integrated and efficient instrument that brings you the independence to perform Sanger sequencing and fragment analysis in your laboratory, under your control and at your convenience.

It is designed for use with existing sequencing chemistries using fluorescently labeled dideoxynucleotide triphosphates and 4-, 5- and 6-dye STR kits from Promega, and other commercially available kits.

Capillary Electrophoresis Just Got Personal

The Spectrum Compact CE System is the solution for academic, clinical research and forensic laboratories looking to take analyses into their own hands. This innovative instrument provides a high return on investment, conserves valuable bench space and allows flexibility in sample batch sizes.





The Spectrum Compact CE System

A personal, benchtop instrument

- Conforms to your workflow
 - » No waiting to batch samples or send samples to an outside lab
- Enables a more efficient workflow
 - » 32 sample capacity using four 8-well strip tubes
 - » 4-capillary cartridge, 36cm
- Saves time and reduces reagent waste

Remote Access software

- Review alerts, consumables and instrument status all from browser application directly accessing the instrument connected on the same network.
 - » Enter sample information
 - » Edit assays and protocols
 - » Monitor runs
 - » Review and download data

Capable of Sanger sequencing and fragment analysis

- Compatible with commercially available sequencing kits
 - » Uses fluorescently labeled dideoxynucleotide triphosphates
 - » Optimized for a broad range of applications including:
 - *De novo* sequencing
 - NGS confirmation
 - Resequencing
 - Mutation detection
 - Mitochondrial sequencing
- Designed to work with all common STR kits on the market
 - » Compatible with 4-, 5- and 6-dye STR chemistries
 - » Other uses include:
 - Microsatellite analysis
 - PCR amplicon sizing
 - SNP genotyping



Integrated Touchscreen Operation

The Spectrum Compact Control Software provides a simple user interface with a clear display of useful features including run set up, consumables and array usage information, as well as system maintenance reminders.

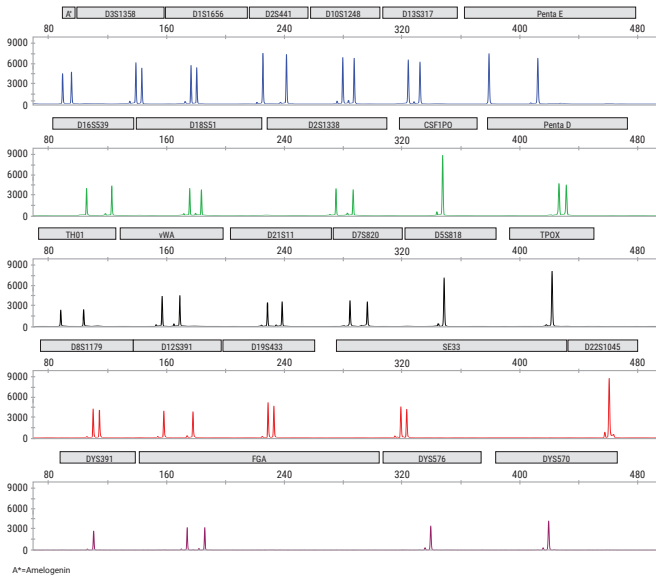
- Easy-to-use operational workflow wizard
- Operations run directly on the instrument touch screen
- Ability to monitor run progress and view analyzed results while a run is in progress
- Pre-loaded assays ready for use
- Export files in .fsa or .ab1 format (compatible with commercially available data analysis software such as GeneMarker® HID, Mutation Surveyor® and GeneMapper®)



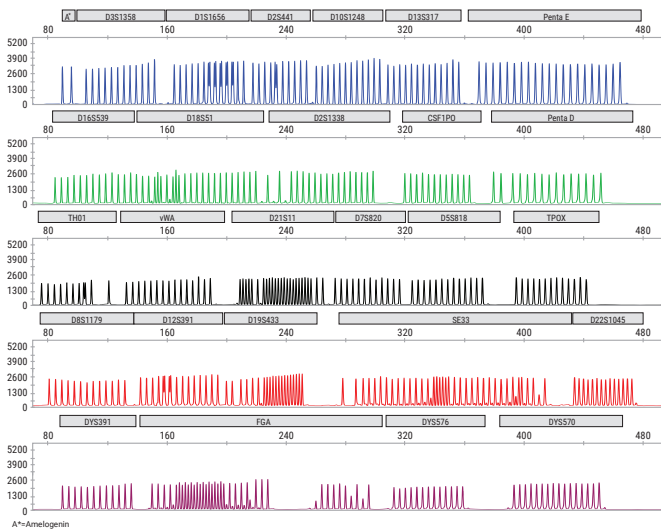


Small-Footprint Advanced Multiplexing

The Spectrum Compact CE System offers the high performance of a 6-dye compatible CE instrument at an affordable price point.



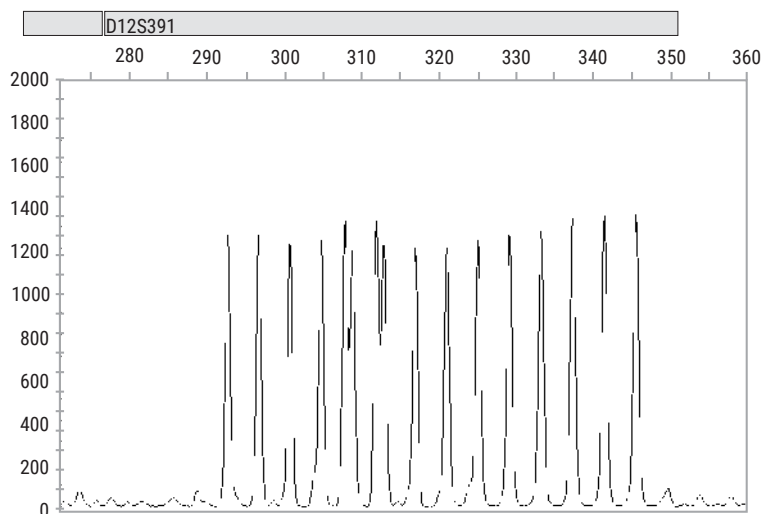
Electropherogram of 1ng of 2800M control DNA analyzed with PowerPlex® Fusion 6C System run on Spectrum Compact CE System. Injection was performed at 1.6kV for 9 seconds.



Electropherogram of the PowerPlex® Fusion 6C System allelic ladder run on Spectrum Compact CE System. Injection was performed at 1.6kV for 9 seconds.



Single-Base Resolution



Spectrum Compact CE System achieves a 1bp resolution as seen in the D12S391 locus in the PowerPlex® 17 ESI System Allelic Ladder. Injection was performed at 1.6kV for 9 seconds.

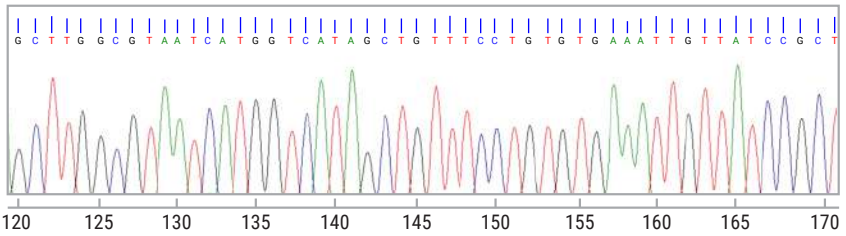
*A personal, affordable benchtop instrument
for Sanger sequencing and fragment
analysis applications*



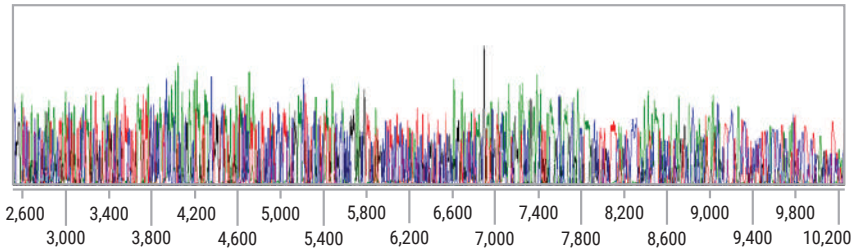
Accurate and Fast Sequencing

The Spectrum Compact CE System supports Sanger sequencing applications used as orthogonal technology for verification of NGS base calls, and DNA and gene sequencing required in a variety of genomic applications.

Panel A



Panel B



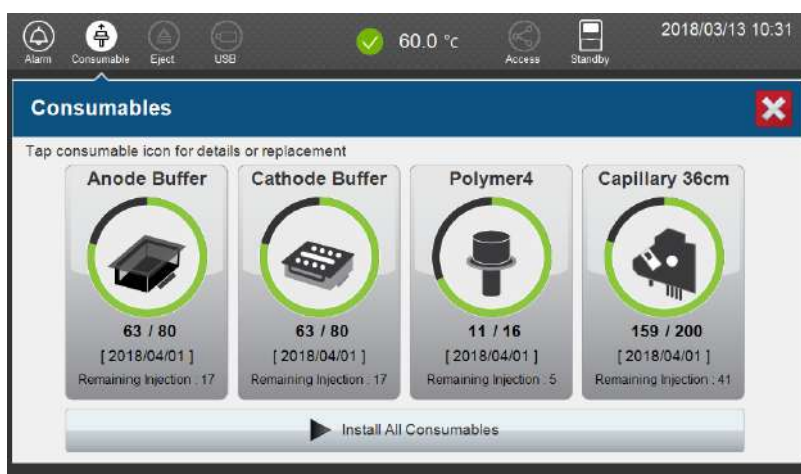
Representative portion of an electropherogram (**Panel A**) generated using the prototype ProDye™ Terminator Sequencing System, on a Spectrum Compact CE System. Injection was performed at 1.2kV for 4 seconds with Polymer7; (**Panel B**) raw data of standard sequencing run.



Spectrum Compact CE System Consumables and Accessories

Plug-and-play, prefilled consumables bring capillary electrophoresis capabilities to the hands of any scientist in the laboratory regardless of skill level or expertise.

Not only is the Spectrum Compact CE System simple to set up and operate, related consumables such as prefilled buffer and polymer are available in convenient packaging. All consumables use 2D barcoding to track key usage information.



The Spectrum Compact CE System Control Software enables real-time tracking of key reagents and consumables.



Spectrum Compact CE System Consumables

Spectrum Compact Capillary Cartridge

- 4-Capillary, 36cm

Spectrum Compact Cathode Septa Mat and Retainer

- Septa mat specific for the Spectrum Compact cathode buffer cartridge

Spectrum Compact Polymer Cartridge

- Available with Polymer4 or Polymer7

Spectrum Compact Plate Base & Retainer, 32-Well

- Compatible with up to four 8-well strip tubes

Spectrum Compact Buffer

- Prefilled, ready-to-use anode and cathode cartridges

Strip Septa Mat, 8-Well

- Silicone septa mat to minimize sample evaporation





Promega Support

Promega chemistries and Spectrum Compact CE System are provided as an integrated system for delivering optimized results for sequencing and fragment analysis. On-site installation and training for the instrument is included with purchase of the instrument. Additionally, flexible service and support options are available, depending on the requirements of your laboratory.

Promega offers service and support plans for preventative maintenance, on-site service and validation plans to ensure minimal interruption of your laboratory operations.

- Phone-based and on-site consultation
- On-site bench work tailored to your requirements
- Rapid turnaround of data analyses and summary reports

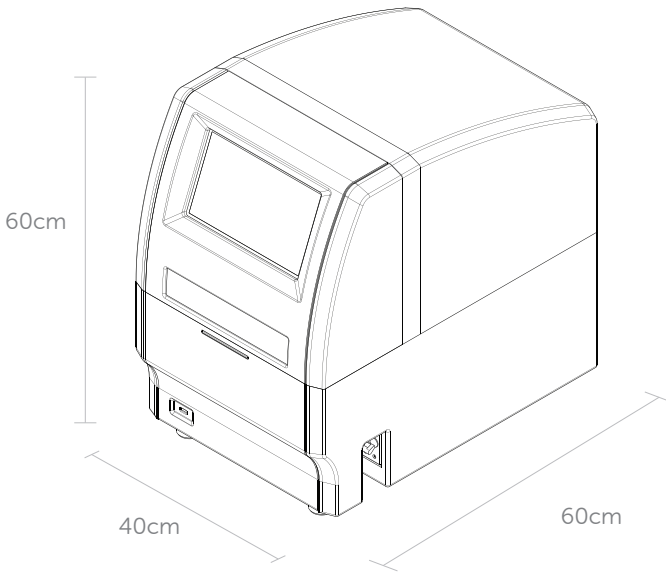
System Components

The Spectrum Compact CE System is supplied as follows:

- Capillary electrophoresis instrument
- Integrated touchscreen with operational software
- On-site service for installation and training
- Remote Access software
- 12 month warranty, including one preventative maintenance visit
- Starter Kits include:
 - » 4-capillary cartridge
 - » Polymer4 and Polymer7
 - » Anode and cathode buffers
 - » Capillary Preservation Buffer
 - » Cathode septa mats and retainer
 - » Plate bases and retainers
 - » Reagents necessary for installation and system test



Spectrum Compact CE System Specifications



Dimensions	40cm W x 60cm D x 60cm H
Weight	45kg
Power Input	100–240Vac; 50/60Hz; 260VA (global compatibility) 15 amps
Operating Environment	15°C–30°C
Sample Capacity	1–32 samples (four 8-well strip tubes)
Injection Throughput	4-capillary cartridge
Capillary Array Length	36cm
Service and Warranty	Service installation On-site training Extended service contracts will be available separately—please inquire.
Validation Support	Available separately—please inquire.



To learn more, visit:

www.promega.com/SpectrumCompact



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