

Easychem 200



Automated Nutrient Analyzer

With the Easychem 200, labs of every size can automate nutrient testing, reduce costs, and streamline their operations.

Direct Reading, Discrete Analyzer

Every lab can reduce costs and increase their test capacity with the Easychem 200, automated nutrient analyzer.

The Easychem 200 comes standard with EPA and ISO methods for **nitrate, nitrite, phosphate, and ammonia** as well as many other parameters.

Manufactured with state-of-the-art components, the Easychem 200's results are highly precise and repeatable with integrated QC protocols and reporting features.

Users can be trained quickly and do not need a chemistry background to operate the instrument.

- ✓ Up to 200 tests per hour
- ✓ Test multiple chemistries at a time
- ✓ Preprogrammed EPA methods
- ✓ No chemistry experience needed
- ✓ Plug & play set up
- ✓ Program daily runs in minutes
- ✓ NELAC compliant
- ✓ True sample blanking
- ✓ Easy & inexpensive to maintain
- ✓ Small bench footprint



*Manufactured by Systea S.P.A.
EPA Award Winning Manufacturer*

Surface, Ground, Drinking, Waste and Seawater

Aldehydes	Chlorides	Hardness	Phenols*
Alkalinty	Chlorine	Iron	Phosphate
Aluminum	Chromium 6+	Manganese	Silicate
Ammonia	Cyanide*	Nitrate	Sulfide
Calcium	Fluoride	Nitrite	TKN

Soils, Plants, Feeds and Fertilizers

Aldehydes	Chlorides	Hardness	Phenols*
Alkalinty	Chlorine	Iron	Phosphate
Aluminum	Chromium 6+	Manganese	Silicate
Ammonia	Cyanide*	Nitrate	Sulfide
Calcium	Fluoride	Nitrite	TKN

*Requires sample pre-treatment

Fast, Accurate and Flexible

The Easychem 200 offers unparalleled flexibility for laboratories that desire to automate the testing process.

Daily worklists can be programmed in minutes which frees the operator to attend to other duties while the Easychem 200 completes the analysis automatically.

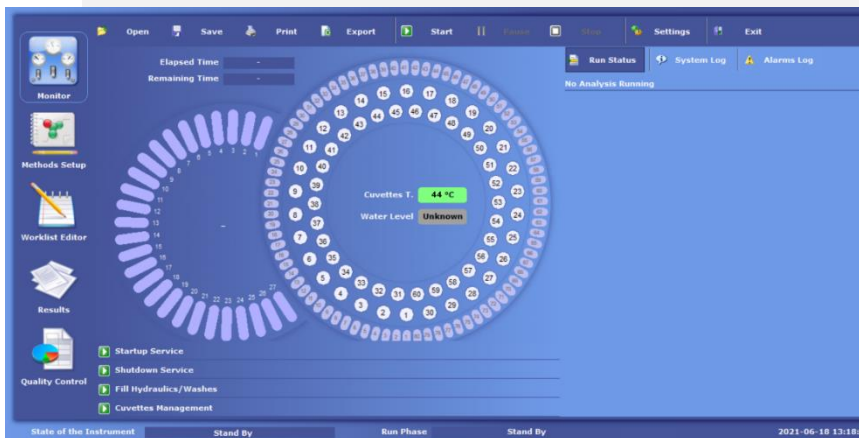
The Easychem 200's automated features include:

- Start up
- Shut down
- Calibration curves
- Pre and post dilution
- Worklist creation
- QC Checks
- Reporting
- Reagent cooling



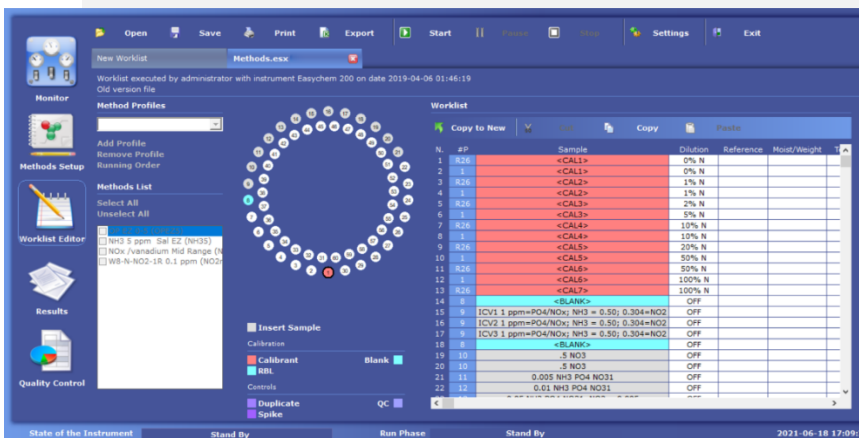
Fusion Software : *Designed for Ease of Use*

The Easychem 200's Fusion software is fully NELAC compliant and comes preprogrammed with EPA and ISO methods for water, soil and plant tissue analysis. The tab design simplifies routines tasks and access to key features such as the system monitor, worklist editor and method set up.



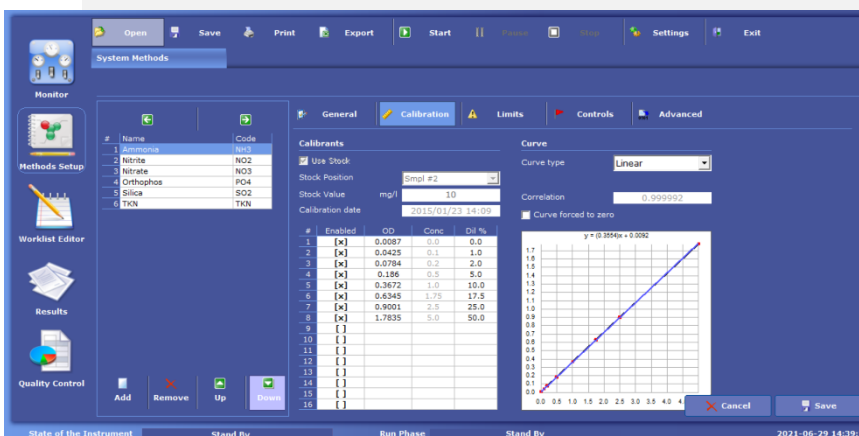
System Monitor:

From the main dashboard, users can view all sample and reagent levels, the temperature of the reaction plate, track the remaining time in the current run as well as program the Easychem 200 to start up and shut down.



Worklist Editor:

Daily worklists can be generated in minutes. The Easychem 200 can automatically generate calibration curves from a known standard and QC checks can be programmed in accordance with every laboratory's SOPs.



Methods Set Up:

Methods can be easily created and modified in the software, without any additional hardware – no extra channels or manifolds needed.

Specifications

Technology	Direct Reading
Samples / reagents preheating	Yes
Sample capacity and number of reagents	60 sample positions/ 27 Reagent positions x 18mL each, including stock & diluents
Test hour	Up to 200 (Single reagent) / 120-150 (dual reagent)
Dosing syringe (sample & reagents)	368 microliters syringe with 0.14 µl resolution; Zero automatic setting; Accuracy +/- 0.5% from 2 to 350 uL
Stock solutions on reagent tray	Yes, working calibrants and QC diluted from stocks
Refrigerated reagent tray	Yes standard
Reagent & Sample level sensor	Yes
Number of reaction cuvettes	80 reaction microcuvettes reusable after wash and QC check, incubation temperature programmable +/- 0.1 °C.
Optical path length (mm)	6.0 mm
Reaction plate temperature	37° to 50°C adjustable +/-0.1°C
Incubator type	Thermoelectric
Flow cell type	Bionex ® washable, wash station included
Main Detector	Colorimetric, temperature controlled; halogen lamp extended UV emission; automated zero settings; accuracy +/- 1% from 0 to 2.5 O.D.; linearity better than 0.5%; noise <+/- 2m Abs. At 340 nm 2.5 O.D..
Detector techn./Numb. of Wavelengths	Interferential Filters / 9+blank
Reading methods	End point: mono or bichromatic; End Point differential (Sample blank correction); Kinetic
Communication & software	USB port; Software compatible with Windows XP, 7.0, 8.0 & 10
Sample analysis	Work lists stored by the software with possibility to select independent list of parameters per each sample,
Sample ID	Alphanumeric
Random access to samples, calib. Etc.	Yes
Sample addition during run	Yes
Sample & reagent blanking	Yes
Working Calibrant dilution	Yes, from stock solution located in the refrigerated tray
Pre run sample dilution	Yes
Post run sample dilution	Yes, automated dilution and rerun of off scale samples
Multilevel QC & Closed loop	Up to 5 QC levels, with closed loop control (QC check & pre programmed actions in case of QC and/or spike recovery failure)
QC database and QC chart	Yes
Automated spike & recovery check	Yes
Automated calibrations.	Yes; up to 16 calibrants
Calibration correction	Yes; enable disable calibrants change calibration fit
Calibration QC check & Calibration repeat	Yes, if correlation lower than set value option for calibration repeat
Reagent Blank OD and Top Cal OD check	Yes, if out of tolerance pre-programmed actions
Results correction	Yes, correction by dilution factor, moisture & weight
Import Work list & export results to LIMS	Yes
Possibility to use multiple diluents	Yes
Size / Weight	40cmx67cmx60cm (HxDxW) / 32Kg
Power Supply	110-240VAC - 50/60Hz Single phase with ground - Fuses 2.0Amp 230VAC, 4.0Amp 115VAC