

5E-TCN2200

Nitrogen/Protein Analyzer



Application

The Nitrogen Protein Analyzer is a powerful Dumas Protein/Nitrogen Analyzer, able to perform precise nitrogen analysis and protein determination, known also as "Combustion method", it ensures precise results in few minutes, breaking down the sample into its elemental compounds. Substances produced, such as H₂O, O₂ and CO₂, are trapped and removed, in order to ensure the correct detection of the nitrogen. It's an alternative to Kjeldahl method for the determination of nitrogen and protein content in different types of sample such as food, feed, soil and liquids. Dumas method is the faster official one, validated by different International Organization, such as AOAC, AACC, ASBC, ISO, OIV, etc.

Specification

Model	5E-TCN2200
Conforms to Method	AOAC 990.03, AOAC 992.15, AOAC 992.23, AOAC 993.13, AOAC 997.09, AACC, ASBC, ISO 29541, ISO 16634, OIV, GT/B 30728, ASTM D5291
Analysis Time	4-6mins, depending on sample combustion conditions
Sampler Loader	Stackable auto loader, up to 140 samples by 4 layers
Repeatability	Nitrogen(Nad) ≤ 0.05%
Sample Mass	Up to 1000mg, depending on sample matrix
Temp. Resolution	1°C
Gas Required*	Helium, 99.99%, 0.25 ± 0.01Mpa
	Oxygen, 99.5%, 0.25 ± 0.01Mpa
	Nitrogen or compressed air, 0.25 ± 0.01Mpa
Consumption	Helium 200ml/min
Measurement Range	Nitrogen: 0.04mg-50mg
Furnace Type	Resistance furnace, Max temp 1050°C
Power Supply	Single phase, AC220V ± 10%, 50/60Hz, 5.5kW
Net Weight	110kg
Dimensions(L×W×H)	690mm×750mm×720mm

***Test Condition:**

If N ≤ 0.5%, 99.995% high purity oxygen is required.