Refractometer

The AIPol-R series fully automatic refractometer is equipped with high-performance linear CCD sensors. It features high-speed, high-precision signal acquisition and analysis technology, along with a semiconductor Peltier super temperature control system. This instrument can efficiently and accurately measure the refractive index (nD) and specific gravity (Brix) of various liquids, including transparent, semi-transparent, dark, and viscous substances



AIPol-R300 Intelligent Digital Refractometer

Application Area

Automatic refractometer has a wide range of applications in petroleum industry, oil industry, pharmaceutical industry, food industry, daily chemical industry, sugar industry, etc., and is also one of the commonly used equipment in schools and related scientific research units

Innovation Points to Improve Efficiency

- Automatic integration, AI automatically sets parameters
- The flashing light source provides a more stable and reliable light source
- The whole machine has passed TART and CE certification
- Built-in Peltier temperature control to improve accuracy and stability
- In line with 21CFR requirements (electronic signature, data traceability, audit tracking, data tamper-proofing and other functions)

The Key Technical Indexes

Scope	1.30000--1.70000 (nD)
Resolution	±0.0001
Accuracy	±0.0002
Sugar range	0-100% (Brix)
Resolution	± 0.01% (Brix)
Definition	±0.05% (Brix)
Temperature control mode	Built-in Peltier
Temperature control range	0℃-65℃
Temperature control stability	±0.01℃
Test mode	Refractive index/sugar content/honey moisture/salinity or custom
Light source	589nm LED Cold light source flashing provides the light source
Prism	Sapphire grade
sample cell	Hastelloy
User management	There are / four levels of permission management
Audit trail	Yes
Electronic signature	Yes
Custom method library	Yes
Export file verification high level protection MD5	Yes
Display mode	7 inch FTF color touch screen
Data storage	32G
Export in multiple file formats	PDF and Excel
Data interface	USB, RS232, RJ45, SD card, U disk (You can configure the upper computer software to upload test data)
Scanner	Supports scanning the QR code of the scanner to directly input information
Compatibility	Compatible with density refraction and can be used with an automatic sampler
Size	430mm x 380mm x 300mm
Power supply	110-220V/50-60HZ
Weight	5kg