

Automatic Refractometer -Digipol-R Series

Brief Introduction

Digipol-R is equipped with a high performance linear CCD sensor. Through high-speed and high precision signal acquisition, analysis and processing technology, the Digipol-R is equipped with a semiconductor Part super temperature control system. It can measure the refractive index (Nd) and the mass fraction of sugar solution (Brix) of transparent, translucent, dark and viscous liquid with high accuracy and efficiency.

Fields of Use

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

Food industry: quality control of raw materials, intermediates and final products; The concentration of dry matter, solids, and sugars; Purity control for products of sugar, dessert, beverage, dairy, chocolate and coffee, oil and fat industries.

Pharmaceutical industry: determination of solid content in blood and urine; Purity control.

Cosmetics industry: determination of refractive index of essential oils and spices; Determine the fatty acid content of soap and fragrance ingredients.

Chemical and petrochemical industries: determination of refractive index of raw materials and analytical reagents; Purity control; Determination of refractive index of petroleum products; Determine the concentration of the cooled lubricating oil.

Features

- 1: Built-in Parpaste temperature control, improve accuracy and stability;
- 2: China's first double temperature control, sapphire prism;
- 3: LED cold light source instead of the traditional sodium light lamp and halogen tungsten lamp;
- 4: Compliance with 21CFR Part 1 audit trail, pharmacopoeia and electronic signature;
- 5: Support network printing, support data statistical retrieval;
- 6: Multi-level authority management, authority can be freely configured;
- 7: 7 "touch color screen, user-friendly operation interface;
- 8: The whole machine has passed TART and CE certification.



Parameters

Model	DigiPol-R200	DigiPol-R300	DigiPol-R500	DigiPol-R600
Range	1.3000-1.7000(nD)	1.3000-1.7000(nD)	1.30000-1.70000(nD)	1.30000-1.70000(nD)
Resolution	0.0001(nD)	0.0001(nD)	0.00001(nD)	0.00001(nD)
Precision	±0.0002	±0.0002	±0.00003	±0.00002
Brix range	0-100%(Brix)	0-100%(Brix)	0-100%(Brix)	0-100%(Brix)
Brix accuracy	±0.1%(Brix)	±0.1%(Brix)	±0.05%(Brix)	±0.01%(Brix)
Test mode	Refractive index / sugar content or customized	Refractive index / sugar content or customized	Refractive index / sugar content / honey moisture / salinity or customized	Refractive index / sugar content / honey moisture / salinity or customized
Temperature control method	No	Built-in Peltier	Built-in Peltier	Built-in Peltier
Temperature control range	Room temperature	5°C-65°C	5°C-65°C	5°C-90°C
Temperature control stability	Room temperature	±0.03°C	±0.02°C	±0.01°C
Light source	LED	LED	LED	LED
Wavelength	589nm	589nm	589nm	589nm
Prism	sapphire	sapphire	sapphire	sapphire
Sample cell	stainless steel	stainless steel	Hastelloy	Hastelloy
Detection method	High-resolution linear CCD	High-resolution linear CCD	High-resolution linear CCD	High-resolution linear CCD
Display method	7 inch FTF color touch screen	7 inch FTF color touch screen	7 inch FTF color touch screen	7 inch FTF color touch screen
Data storage	32G	32G	32G	64G
Output method	USB, RS232, RJ45, SD card, U disk	USB, RS232, RJ45, SD card, U disk	USB, RS232, RJ45, SD card, U disk	USB, RS232, RJ45, SD card, U disk
User Management	Yes/four-level authority management	Yes/four-level authority management	Yes/four-level authority management	Yes/four-level authority management
Audit trail	YES	YES	YES	YES
Electronic signature	YES	YES	YES	YES
Custom method library	YES	YES	YES	YES
Export file to verify high-level protection MD5	YES	YES	YES	YES
WIFI printing	YES	YES	YES	YES
Export in multiple file formats	PDF & Excel	PDF & Excel	PDF & Excel	PDF & Excel
Size	360*300*155mm	360*300*155mm	360*300*155mm	360*300*155mm
Power supply	220V / 50Hz	220V / 50Hz	220V / 50Hz	220V / 50Hz
Weight	5kg	5kg	5kg	5kg