

Refracto 30PX/30GS Portable Refractometers



Measurement Cell with Temperature Sensor

The 30PX and 30GS differ in their prism and measurement cell. The 30PX uses a glass prism held by a stainless steel ring. With a sapphire prism held by a gold-plated brass ring, the 30GS has the broadest measurement range than any other portable instrument.



Temperature Compensation

The refractive index of a sample depends on temperature. During measurement, Refracto determines the temperature and then corrects the refractive index to a standard temperature of 20°C or any other temperature the user defines. Up to 10 user defined correction coefficients can be stored which allows for quick measurements of different sample types.



Handheld or Benchtop

Refracto 30PX/30GS is a handheld and benchtop refractometer in one. The cell can be immersed directly into the sample, or place the Refracto 30PX/30GS on a flat surface and add a drop of sample into the measurement cell. This flexibility allows you to take accurate measurements the way you need.



Data Management

Refracto 30PX/30GS allows you to save 1,100 results – including information such as sample and instrument identification, measurement unit, temperature correction coefficient, date, and time. Data can be transferred to a PC or printer at any time using the infrared interface.



Reliable Results Within Seconds

Whether you are checking the sugar concentration in beverages or the hydrocarbon content in motor fuels, Refracto 30PX/30GS returns accurate and precise results within seconds, displayed in the measurement units needed.

Using the total reflection method combined with precise temperature measurement and an elegant user interface, Refracto 30PX/GS quickly and consistently gives reliable results.

Specifications Refracto 30PX/30GS

Measurement Method	Determination of the angle of total reflection of the D-line of sodium (589.3 nm)
Refractive Index	Measurement range: 1.32 – 1.50 (PX), 1.32 – 1.65 (GS) Resolution: 0.0001 Accuracy: ± 0.0005
Brix % (%)	Measurement range: 0 – 85 Brix% (PX), 0 – 100 Brix% (GS) Resolution: 0.1 Brix% Accuracy ± 0.2 Brix%
Temperature (°C or °F)	Measurement range: 10 – 40 °C Resolution: 0.1 °C Display: °C or °F Ambient temperature: 5 – 35 °C
Measurement Units	nD, nD temperature compensated, Brix%, HFCS42, HFCS55, T.A. 1990, °KMW (Babo), °Baume, °Oechsle (D, CH), w/w%, v/v%, specific gravity and freezing point (°C or °F) for ethanol and NaCl, w/w%, v/v% and freezing point (°C or °F) for ethylene glycol and propylene glycol, w/w% and v/v% for isopropanol, user defined unit
Temperature Compensation	With user-defined temperature compensation coefficient (nD temperature compensated, user defined), or automatically (all other units). Up to 10 temperature correction coefficients can be stored in the instrument
Calibration	With pure water
Data Memory	Up to 1100 results (measured value, sample and instrument identification, temperature correction coefficient, date, and time)
Display	Backlit LC-Display
Interface	Infrared for data transfer to PC and printer (IrDA or RS232C protocol)
Weight	Approximately 250 g
Batteries	2 x LR3, 1.5 V, type AAA with approximately 60 hours battery life
Materials	Housing: PBT Measurement cell (PX): Glass, stainless steel Materials with sample contact (PX): Glass, stainless steel, PBT Measurement cell (GS): Sapphire, hard gold plated brass Materials with sample contact (GS): Sapphire, gold, PBT

Accessories Refracto 30PX/30GS

Item	Description	Part No.
Refractive Index Standards	Density/Refractive Index Standard, Water	51338010
	Density/Refractive Index Standard, 1-Bromonaphthalene	51338014
	Density/Refractive Index Standard, 2,4-Dichlorotoluene	51338013
	Density/Refractive Index Standard, Dodecane	51338012
Cleaning Tissues	10 pack of tissues for routine cleaning and instrument decontamination	51325003
Sample Bottles	Lightweight plastic sampling bottle	51300240
LabX® Direct	A data collection and evaluation software that allows the user to capture results on the go	51324103



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