VEE GEE

Digital Refractometers

PDX-Series Models

- **Top-Level Features In A Portable, Palmtop Design**
- **Simple, Push-Button, Menu-Driven Operation**
- **High Accuracy, Wide Ranges, & Multiple Scales**

The VEE GEE PDX-Series Digital Refractometers perform at the highest level available in a portable digital design. All models are exceptionally simple to operate, are loaded with high-end features and functions, and provide fast and highly accurate results for liquid solids testing.

Easy to Use. Operation consists of placing 1 or 2 drops of a sample on the prism and pressing the READ/ENTER key; within 1 second, the reading is shown on the extra-large LCD display. With one push of the ZERO/CALIBRATE button, ALL units calibrate with distilled water. Oil standards are no longer required for calibration.

Automatic. The LED light source detects the refractive index (nD) of the sample, the thermosensor detects current prism temperature, the result is calculated and quickly displayed in the selected scale on the LCD readout.

Durable. All PDX-Series models feature rugged contruction to provide years of reliable use. The water resistant design allows them to be used in humid or harsh conditions; the stainless-steel wells stand up to even corrosive samples.

Compact & Portable. The small size and battery power (9V) of the PDX-Series models allow them to be used anywhere...whether it's in the field, plant, or lab.

Professional Features. Extra-large, menu-driven LCD display; push-button operation; real-time prism temperature display in either °C or °F; Brix and Refractive Index (nD) scales on all units, automatic temperature compensation (w/ ATC ON/OFF) function, power auto-off function; battery-level indicator.

Custom High & Low Limits. Allows users to quickly monitor the readings of samples by individually setting high and/or low limit values. If a reading falls above or below the set values, the red LED and the high or low limit LCD indicators flash until a key is pressed.

Supplied With: Storage Case (1), Carrying Case (1), Prism Cover (2), Plastic Transfer Pipet (1), 9V Battery (1), Instruction Manual (1).

LCD Display. The extra-large, menu-driven LCD displays the current reading, prism temperature level (°C or °F), current scale, ATC function, high & low limits, and battery level.

Keypad. Constructed of ultra-durable Lexan® material, the color-coded keypad features large buttons and a water-resistant design. The 7-button design provides one-push operation for nearly all of the features.

READ / ENTER	**Read/Enter.** One press provides quick and accurate readings. Also used as the ENTER key in menu mode.
°C / °F ◄	**Temperature Display.** Allows the user to quickly toggle the temperature display between °C and °F. Also used as a cursor key in menu mode.
ATC ▲	**Automatic Temperature Compensation.** Activates and deactivates the ATC function. Also used as a cursor key in menu mode.
LIMIT / Y/N	**High-Low Limits.** Sets the high and low reading limits. Also functions as the Y/N key in menu mode.
ZERO	**Zero/Calibration.** One press zeroes/calibrates the unit. To eliminate accidental calibrations, the key must be pressed for 3 seconds.
SCALE	**Multiple Scales.** Quickly toggles the refractometer through the Brix, Refractive Index (nD), and Salinity (Model PDX-1) scales.
ON/OFF	**On/Off.** Power key. Battery-saving auto-off function powers the refractometer down after 3 minutes of non-use.

Prism Assembly. Optical glass prism encompassed by a high-polish, stainless-steel well. The thermosensing unit detects prism temperature at reading for highly-accurate results.

Model PDX-95

VEE GEE PDX-Series Specifications

Measuring System:	Optical Refraction Critical Angle Detection		
Measuring Range:	Brix:	0.0-45.0%	(Model PDX-1)
		28.0-65.0%	(Model PDX-2)
		60.0-92.0%	(Model PDX-3)
		0.0-95.0%	(Model PDX-95)
	Refractive Index (nD):	1.3330-1.4098	(Model PDX-1)
		1.3800-1.4535	(Model PDX-2)
		1.4400-1.5230	(Model PDX-3)
		1.3330-1.5320	(Model PDX-95)
	Salinity:	0.0-28.0%	(Model PDX-1)
Resolution:	Brix:	0.1%	
	Refractive Index (nD):	0.0001	
	Salinity:	0.1%	(Model PDX-1)
Accuracy:	Brix:	±0.1%	
	Refractive Index (nD):	±0.0001	
	Salinity:	±0.1%	(Model PDX-1)
Lo-Limit / Hi-Limit Resolution:	Brix:	0.1%	
	Refractive Index (nD):	0.0001	
	Salinity:	0.1%	(Model PDX-1)
Temperature Compensation:	5 to 35°C		
Ambient Temperature:	5 to 35°C		
Measuring Temperature:	5.0 to 35.0°C / 41.0 to 95.0°F Note: Prism Temperature Can Be Displayed In Either °C or °F		
Storage Temperature:	-10 to 50°C		
Measuring Time:	1.0 Seconds		
Sample Type:	Transparent, Translucent, & Opaque		
Sample Quantity:	>0.1mL		
Relative Humidity:	<90%		
Altitude:	<2000m Above Sea Level		
Calibration Liquid:	Distilled Water		
Display:	LCD		
Measuring Light Source:	LED		
Prism:	Optical Glass		
Stage:	SUS316 Stainless Steel		
Power:	9V Battery (1)		
Auto-Off Mode:	>3.0 Minutes Of Non-Use		
Battery Life:	5000+ Readings		
Dimensions:	170 (L) x 95 (W) x 45 (H) mm		
Weight:	250g		
Supplied With:	Storage Case (1 ea.) Carrying Case (1 ea.) Prism Cover (2 ea.) Plastic Transfer Pipet (1 ea.) 9V Battery (1 ea.) Instruction Manual (1 ea.)		

Model PDX-1

Model PDX-2

Model PDX-3

Model PDX-95

VEE GEE Ordering Information

Cat. No.	Model	Scale	Range	Resolution	Accuracy	ATC	Dimensions	Weight	Typical Uses
44001	PDX-1	Brix	0.0-45.0%	0.1	±0.1	Yes	170 x 95 x 45mm	250g	Fruit, Juices, Soft Drinks, Wine Must, Cutting & Grinding Lubricants, Cleaning Agents, Pickling Brines
		Refractive Index (nD)	1.3330-1.4098	0.0001	±0.0001	No			
		Salinity	0.0-28.0%	0.1	±0.1	Yes			
44002	PDX-2	Brix	28.0-65.0%	0.1	±0.1	Yes	170 x 95 x 45mm	250g	Concentrated Fruit Juices, Jam, Sauces, Syrups, Canned Goods, Ketchup
		Refractive Index (nD)	1.3800-1.4535	0.0001	±0.0001	No			
44003	PDX-3	Brix	60.0-92.0%	0.1	±0.1	Yes	170 x 95 x 45mm	250g	Jam, Jelly, Marmalade, Malt, Liquid Sugar, Honey, Mineral Oils, Essential Oils
		Refractive Index (nD)	1.4400-1.5230	0.0001	±0.0001	No			
44101	PDX-95	Brix	0.0-95.0%	0.1	±0.1	Yes	170 x 95 x 45mm	250g	Fruit, Juices, Soft Drinks, Wine Must, Concentrated Fruit Juices, Jam, Jelly, Syrups Liquid Sugar, Honey, Oils
		Refractive Index (nD)	1.3330-1.5320	0.0001	±0.0001	No			