

# Digital Fiberoptic Refractometer

We're changing the way you look at refractometers with the MISCO Digital Fiberoptic Refractometer. It is fast, easy to use, and incorporates the latest cutting-edge fiberoptic sensor technology.

Simply dip the end of the instrument into a liquid solution, press a button, and the microprocessor quickly displays a digital readout with computer precision. Nonlinear temperature compensation is automatic and insures that fluids read between 0 and 50°C (32 and 122°F) are measured accurately.

The large LCD display is easy to read and removes the subjectivity associated with reading traditional refractometers. Gone are the days of trying to adjust your eyeglasses, while squinting into a small eyepiece, to determine where a fuzzy little boundary line crosses tiny scale divisions.

Calibration is automatic and does not require the use of special calibration solutions or tools. The instrument automatically calibrates itself to water and is ready to use in seconds. No more screws to turn and nothing to adjust.

Whatever the application, we have a specific scale that will measure exactly what you want to measure or we'll make one custom for you!



- ✓ Digital Accuracy
- ✓ Five Scales Per Unit
- ✓ Auto Calibration
- ✓ Auto Temperature Compensation
- ✓ Custom Scales Available

**MISCO**<sup>®</sup>  
www.misco.com

# Digital Fiberoptic Refractometer

## Quality You Can Measure

"The accuracy of your measurement is always dependent on the quality of your instrument."

### Just Dip & Read

The DFR is the first digital probe-type refractometer. Just dip it in a fluid, press a button, and get an instant digital readout. No need to bring nasty chemicals or body fluids near your eyes. It is easier to use than a television remote control.

### Choose Up To Five Scales

All MISCO DFR's can be programmed with up to five different scales per instrument. Select from the hundreds of available scales. If you ever change your mind, send it back and we'll reprogram it for you. Whatever the application, we have a scale that will measure exactly what you want to measure or we'll make one custom for you!

### Fiberoptic Sensor

The DFR uses the latest cutting-edge fiberoptic sensor technology to measure the refractive index of a fluid. The sensor is protected by a sapphire window (hardest material next to diamond) and should last indefinitely.

### Auto Calibration

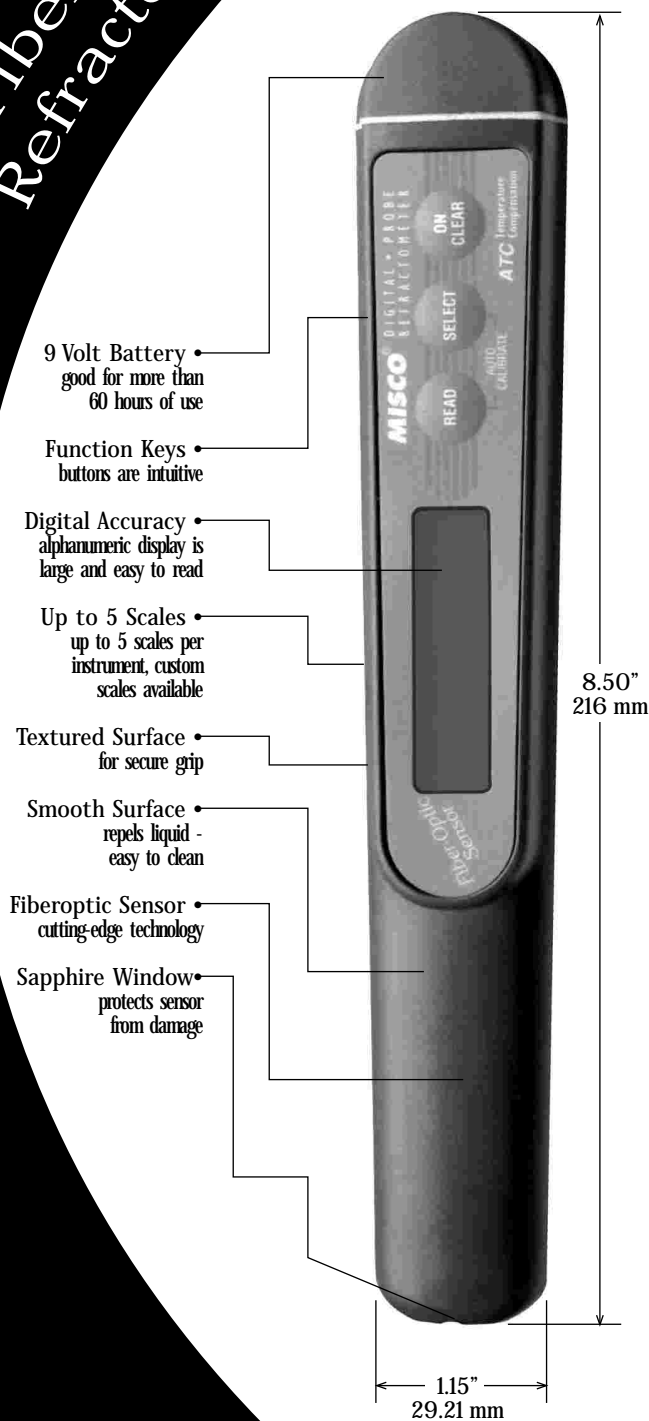
Calibration is automatic and does not require the use of special calibration solutions, or tools. The instrument automatically calibrates itself to water and is ready to use in seconds. No more screws to turn and nothing to adjust.

### NIST Certified Calibration & Traceability

The DFR is the ONLY refractometer that comes with a serial number laser-etched into the body to provide instrument traceability. Multipoint calibration traceable to NIST is available on request for all DFR's. MISCO calibration program provides full compliance with International Standard ISO 10012-1:1992(E) and ANSI/NCSL Z540-1-1994. No other refractometer is put through such a rigorous calibration and testing program.

### Built Tough

The DFR is built from high-impact, chemically resistant Valox plastic. It is water resistant and designed to operate in demanding industrial environments.



### Standard Specifications

Fluid	Range	Resolution	Precision
Refractive Index	1.3280 to 1.4330	0.0005	±0.0005
Brix	0 to 56	0.25	±0.25
Weight:	150g (5.3 oz) with battery		
Dimension:	216 mm x 38.1 mm x 25.4 mm (8.5" x 1.5" x 1")		
Battery:	9 Volt - Good for 60 hours of use		
Oper. Range:	0°C to 50°C (+32°F to 122°F)		
ATC Range:	0°C to 50°C (+32°F to 122°F) - Non-Linear Temp. Comp.		

Hundreds of Scales to Choose From. Custom Scales Available on Request.

## MISCO® Products Division

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