

Optical refractometers

Optical instruments that through refraction are suitable for detecting the concentration of a substance diluted in water. Reliable and simple to use, simply apply a drop of emulsion on the mirror lower the tab and look through the eyepiece to read the concentration on the graduated scale.

Technical features

Measuring scale 0-10% or 0-18% or 0-32% Brix or automotive specific Accuracy +/- 0.1% for 0-10% version and 0.2% for others Adjustment and zeroing screw Automatic temperature compensation (no for MIXI R10 version) Body constructed of metal, glass mirror

Supplied with shockproof box, semi-leather case, zeroing accessories

Available models

Item code	Description	
MIXI R10	MIXI Refractometer 0-10% Brix	
MIXI R18	MIXI Refractometer 0-18% Brix	
MIXI R32	MIXI Refractometer 0-32% Brix	
MIXI REF412K	MIXI refractometer for checking radiator liquids and batteries	

NB: with some emulsions the percentage display is blurry and with little contrast, in which case we recommend the digital refractometer shown below



Refractometers item code MIXI R18



Refractometer with all the accessories provided



Digital refractometers

They measure the concentration of emulsifiable oil in water, expressed in % Brix or refractive index. They are portable, rugged and water-resistant instruments, IP65 degree of protection. Refractive index measurement is quick and easy. After easy calibration with distilled or deionized water, the instrument measures the concentration in % Brix or refractive index of the sample in seconds. This digital refractometer eliminates the uncertainty typical of optical refractometers and can be easily transported to make measurements directly where they are needed without the use of an analytical laboratory. The large color display simultaneously shows percentage and temperature, as well as battery charge indication and other useful messages.

Technical features

Measuring scale 0-50% Brix or refractive index 1,3330-1,4200 nD Resolution 0,1% Brix, precision +/- 0,2% Refractive index resolution 0,0001 nD precision +/- 0,0003 nD 1.8" TFT color display Photodiode array readout sensor Calibration with distilled water Instantaneous value reading Stainless steel measuring cell Battery life of up to 30,000 readings Battery is rechargeable up to 500 times Automatic temperature compensation (ATC) Minimum liquid volume 2-4 drops Operation from sea level up to 2000 mt Operating temperature from 5 to 40°C humidity up to 80% Storage temperature 0 to 50°C humidity up to 80% IP65 degree of protection Automatic shutdown after 60 seconds of inactivity Rechargeable lithium battery via supplied MicroUSB cable (5 volts 1 amp) Dimensions 132 x 69 x 30 mm Weight 125 grams (without battery)

Available model

Item code	Description
HIDR-50	Portable digital refractometer 0-50% Brix concentration or refractive index 1.3330-1.4200 nD



Digital portable refractometer



Included with the digital refractometer is a sturdy carrying case as well as dropper vial and charging cable