

# OPTIKA

M I C R O S C O P E S

I T A L Y



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## REFRACTOMETERS POLARIMETER

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*Refractometers and polarimeter*

# Refractometers & Polarimeter

Italian headquarters



Optika Microscopes is the optical microscopy division of M.A.D. Apparecchiature Scientifiche, a Company established over 30 years ago as a key actor in the field of scientific instrumentation.

A team of 60 people in 4 European locations works on the development of new models, on production, on quality control, on supply and aftersales services. A network of local distributors extends to the end users the Optika excellence in quality, innovation, competitive prices and assistance.

To the present day, Optika Microscopes offers more than 80 different microscope models, with full accessories, for the most diverse fields of optical microscopy. A challenging market, that Optika Microscopes approaches with professionalism and commitment.

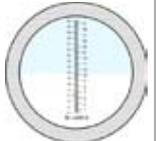
## HAND REFRACTOMETERS



HR-110 Hand refractometer, 0-18%  
 Measuring range: 0-18% Brix  
 Resolution: 0.1% Brix  
 Without ATC



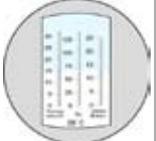
HR-120 Hand refractometer, 0-32%  
 Measuring range: 0-32% Brix  
 Resolution: 0.2% Brix  
 Without ATC



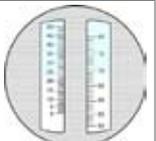
HR-130 Hand refractometer, 0-32% ATC  
 Measuring range: 0-32% Brix  
 Resolution: 0.2% Brix  
 With ATC  
 Compensation temperature range: 10°C-30°C



HR-140 Hand refractometer, 0-32% ATC, triple scale  
 Measuring range: 0-32% Brix, 0-140° OE (Oechsle), 0-40° Babo (KMN)  
 Resolution: 0.2% Brix, 1% OE, 0.2° Babo  
 Without ATC



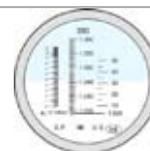
HR-150 Hand refractometer, 0-80%, double scale  
 Measuring range: 0-80% Brix  
 Resolution: 1% Brix  
 Without ATC



## Refractometers & Polarimeter

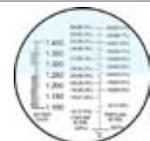
HR-160 Hand refractometer for urine and proteins

Measuring range: Serum Protein 0-12g/dl, Specific Gravity 1.000-1.050sg, Refractive Index: 1.330RI-1.360RI  
Resolution: Serum Protein 0.2g/dl, Specific Gravity 0.005sg, Refractive Index 0.0005RI  
Without ATC



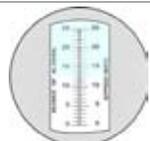
HR-170 Hand refractometer, for battery, antifreeze

Measuring range: Ethylene Glycol -60°C (66.6%)-0°C (0%), Propylene Glycol, -50°C(62.4%)-0°C (0%), Battery 1.100-1.400sg  
Resolution: Ethylene Glycol 5°C, Propylene Glycol 5°C, Battery 0.01sg  
Without ATC



HR-180 Hand refractometer for wine and grape

Measuring range: Alcohol 0-25%  
Resolution: Alcohol 0.2%  
Without ATC



HR-190 Hand refractometer, 0-28%, for salinity

Measuring range: Salinity: 0-28%  
Resolution: Salinity: 0.2%  
With ATC  
Compensation temperature range: 10°C-30°C



HRD-300 Digital refractometer 0-45%, Brix Measuring range: 0-45% Brix Resolution: 0.1% Brix  
Automatic Temperature Compensation Temperature range: 0-40°C, 32-104°F  
Precision of temperature measurement: 1°C, 2°F Temperature resolution 0.1°C  
Operation temperature 0-35°C, 32-90°F Storage temperature: 0-50°C, 32-122°F  
Dimension and weight: 185x59x45mm, 230g Power Supply: 1 battery 9v Alarm of Low Voltage



HRD-400 Digital refractometer 0-28%, for salinity

Measuring range: 0-28% Resolution: 0.1%  
Automatic Temperature Compensation Temperature range: 0-40°C, 32-104°F Precision of temperature measurement: 1°C, 2°F  
Temperature resolution 0.1°C Operation temperature 0-35°C, 32-90°F Storage temperature: 0-50°C, 32-122°F  
Dimension and weight: 185x59x45mm, 230g Power Supply: 1 battery 9v



HRD-500 Digital refractometer, for urine, serum and DI Measuring range: Urine SP.G 1.000-1.050, Serum P. 0-12g/dl,  
Refractive Index 1.3330-1.3900 Resolution: Urine SP.G 0.001, Serum P. 0.1g/dl,  
Refractive Index 0.0001 Automatic Temperature Compensation Temperature range: 0-50°C, 32-122°F  
Precision of temperature measurement: 1°C, 2°F Temperature resolution 0.1°C Operation temperature 0-35°C, 32-90°F  
Storage temperature: 0-50°C, 32-122°F Dimension and weight: 185x59x45mm, 230g Power Supply: 1 battery 9v



### 2WAJ ABBE BENCH REFRACTOMETER

Main prism: horizontal Secondary prism: fitted on a hinge  
Refraction index scale: Nd 1.300 - 1.700  
Precision: Nd  $\pm 0.0003$   
Division: Nd 0.0005  
Sugars scale: 0-95% from Nd 1.300 - 1.530  
Precision: 0-50% = 0.2%; 51-95% = 0.1%  
Division: 0,25%  
Thermometer scale: 0°C - 70°C, div. 1°C  
Weight: 4 Kg Size: 140 x 100 x 235 mm



**2WAJ**

### POL-1 BENCH POLARIMETER

Circular polarimeter using Nicol prisms, with monochrome light source  
(589.3 Nm sodium bulb). Measurement range:  $\pm 180^\circ$   
Precision: 0.05% Division: 1°  
Magnification: 3x Eyepiece: with fine focusing  
Stabilisation time: 5 mins. approx.  
Polarimeter tubes: 100 mm and 200 mm  
Size: 510 x 135 x 380 mm Power supply: 230V/50Hz, 30W

Replacement parts for POL-1 polarimeter:

POL-1.1 Sodium bulb  
POL-1.2 100 mm polarimeter tube  
POL-1.3 200 mm polarimeter tube



**POL-1**

[WWW.OPTIKAMICROSCOPES.COM](http://WWW.OPTIKAMICROSCOPES.COM)

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