

# TRS-5100

© TOTAL REFRACTION SYSTEM

The **TRS-5100** replaces the manual refractor and allows the doctor to control the refraction process through a keypad. With the TRS, the operator can remain comfortably seated throughout the entire exam, eliminating repetitive stress injuries. The TRS enhances the patient experience through a faster, more modern exam. The entire refraction process can be pre-programmed to increase staff efficiency and maximize patient flow. The TRS-5100 generates extremely accurate and reliable refractions, minimizes staff variables, eliminates transcription errors, while smoothly integrating with EMR systems.



## FEATURES

- Color touch screen
- Improved test and target design
- Intelligent cross cylinder
- Multiple near tests
- Tilt screen for near testing
- Near reading card lights built-in
- One touch toggle for “Quick Refract” sequence
- Ability to compare old Rx to subjective Rx at the push of a button



Marco communicates with most EMR companies. Call for details.

**MARCO**

THE LEADER IN VISION DIAGNOSTICS

# TRS-5100 Total Refraction System Specifications

## Measuring Range

<b>Sphere</b>	-29.00 to +26.75D (0.12D / 0.25D / 1D / 2D / 3D steps)
<b>Cylinder</b>	0 to ±8.75 D (0.25D / 1D / 2D / 3D steps)
<b>Axis</b>	0 to 180° (1° / 5° / 15° steps)
<b>PD</b>	48 to 80mm (far vision) 50 to 74mm (near vision) (0.5 / 1mm steps) 54 to 80mm (Far PD at which both batteries can converge)
<b>Rotary Prism</b>	0 to 20D (0.1 / 0.5 / 2D increments) 0 – 20D (0.5D, 1D, 2D steps)
<b>Auxiliary Lenses</b>	Occluder, Polarizing Lenses, Pin Hole (1mm), 10 base-in prism, Red Maddox Horizontal (right eye), 6 base-up prism, Red Maddox Vertical (left eye), Cross mark for P.D., Red Lens (right eye), .50 fixed cross cylinder, Green Lens (left eye), Retinoscopic Lens, (+1.5D, +2.0D)
<b>Refraction Distance for Near Vision</b>	350 to 700mm (50mm increments)
<b>Visual Field</b>	40° (VD = 12mm) 39° (VD = 13.75mm)
<b>Forehead Rest Adjustment</b>	15mm
<b>Vertex Distance</b>	12-20mm (12, 13.75, 16, 18, 20mm)

## General Information

<b>Horizontal Level Adjustment</b>	±2.5°
<b>Display</b>	8.4-inch color LCD with touch screen
<b>Power Supply</b>	AC 100 / 120 / 230V 50 / 60Hz
<b>Power Consumption</b>	120 VA

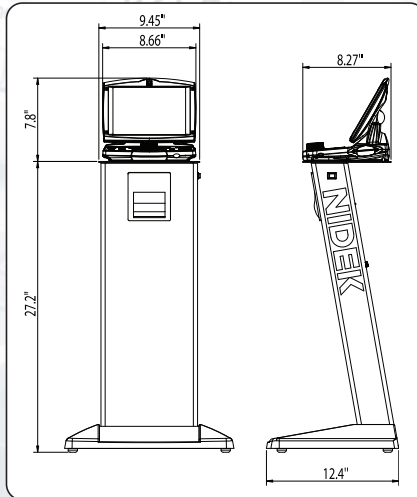
## Dimensions & Weight

### W x D x H

<b>Main body</b>	15.94 x 4.0 x 10.86" / 12.8" with bracket / 7.7 lbs.
<b>Control box</b>	8.66 x 8.1 x 7.87" / 4.2 lbs.
<b>Relay box</b>	7.63 x 8.93 x 2.83" / 8.8 lbs.
<b>Printer</b>	4.0 x 3.38 x 4.76" / 0.66 lbs.
<b>RT Arm</b>	Electromagnetic lock, fully moveable up/down and back/forth



Manufactured by Nidek



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ID :
NAME: M/F
JAN/6/2006 1:39 PM
WD=40cm

--<R>--<L>
FAR
  <R> <L>
  30 60

Unaided Acuties
  <R> <L>
  30 60

Lensmeter Readings
  +0.25 SPH -0.25
  -0.75 CYL -1.25
  159 AXS 19
  <25> UA <30>

Acuity with Glasses
  PD
  62.0

--<R>--<L>
FAR
  +1.25 SPH +0.25
  -0.75 CYL -1.00
  158 AXS 9

Auto Refractor Readings
  <R> <SUBJ> <L>
  <R> <L>
  +1.25 SPH +0.25
  -0.75 CYL -1.00
  158 AXS 9
  +1.25 ADD +1.25
  UA

Acuties <15> <15> <20>
  PD
  60.0

--<R>--<L>
FAR
  +1.00 SPH +0.25
  -0.75 CYL -1.00
  160 AXS 10
  +1.25 ADD +1.25
  UA
  <15> <15> <20>

NEAR
  +2.25 SPH +1.50
  -0.75 CYL -1.00
  160 AXS 10
  <20> <20> <20>

Keratometer Readings
  <R> <L>
  7.85 R1 7.81
  43.00 R2 43.25
  44.00 R2 44.75
  171 AXS 160

Test time 3:17
NIDEK RT-5100
    
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Measurement values are printed out for easy evaluation.

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Phoria BO 2.50 PRSM BO 2.50
  B 0.00 B 0.00
Divergence Div 5.00/6.00/4.00
Convergence Conv 8.00/13.00/10.00
NEAR
  +2.50 SPH +1.50
  -0.75 CYL -1.00
  158 AXS 9
  UA
Near Acuties <20> <20> <20>
Near Phoria BI 1.50 PRSM BI 1.50
  B 0.00 B 0.00
Near Point Convergence < NPC >
  10cm 8.0MA 48.0Prism
Near Point of Accommodation < NPA >
  BIN: 20cm 3.75D
Negative Relative Accommodation < NRA >
  BIN: +2.25/-
Positive Relative Accommodation < PRA >
  BIN: -2.50/-
Fusion Check :
4(Fusion)
Stereo Check : 1'
Aniseikonia(U) : OK

NIDEK RT-5100
    
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Additional information can be printed.

