



## YANG Vision Tester Technical Sheet

### *Description*

YANG is an innovative diagnostic instrument that, with a strict approach to the quantification of the visual abilities, enables the practitioner to obtain objective results in the visual functionalities evaluation.

YANG joins in a single instrument design, technological evolution and the clinical precision of the vision professionals.

### *Components*

YANG is made of a 19" LCD Monitor and a bi-directional IR infrared remote with a backlit liquid crystal display.

The embedded PC has a "Solid state" memory for long lasting performance and liability. In order to keep the same test conditions on time, the LCD Monitor features an automatic luminance meter to set the proper screen luminance according to the environmental one, in this way the variability due to different luminance conditions is minimized. The CL display remote with easy and direct functions, is designed for fast and secure test management.

### *Functionalities*

YANG combines in a single diagnostic instrument the generation of visual stimuli and the data elaboration function; the unit is provided of a wall mount and can be put on a desk, the remote recharges when placed in the recharge bay hosted by the main unit.

The display can visualize all the different kind of visual test charts with the highest quality and resolution, while the remote is used to manage the YANG unit. The test data can be visualized on the LCD display or examined directly on the remote display.

The optotypes sequence can be randomized, in this way the symbols change at the time, avoiding in this way the patient memorization.

YANG features the most common standardized and accepted tests to evaluate and measure in an effective and quick way:

- contrast sensitivity
- chromatic sense
- visual acuity
- binocular vision
- stereoscopic vision

When performing a character test, YANG enables the practitioner to:



- do a dichromatic balance test
- display single or multiple lines with same or different size
- use a vertical or horizontal mask
- show a single character
- swap the stimuli and background colors (black letter on a white background and vice-versa)
- invert the characters when using a mirror for use in small rooms
- measure the contrast sensitivity with report of the SC curve

YANG features the following functions:

- possibility of changing the VA scale choosing among 10 different, each one with different standard: decimal notation, X/10, Logarithmic, USA 20ft, USA 10ft, LogMAR, metric system: 3m, 4m, 5m, 6m
- minimum VA value equal to 0,5/10 (useful with low-vision patients)
- setting the chair distance between 0,5 and 9 metres
- visualization of the chart information with the 'Help button'
- automatic reporting
- Ishihara plates
- stereo test
- innovatory polarization mode for dissociative tests

### *Features and Benefits*

**Technology:** YANG is a system based on a computerized main unit. The high definition and quality of the LCD screen features the highest quality in the visualization of the stimuli and highest detail precision. The DVD reader can be used to play flash videos and movies, very useful when examining children, and is the most convenient way to update the system software.

**Software:** YANG software has been developed in a Windows® based system. The software architecture has been designed to allow the user the customization of the functions according to his needs and preferences. Different users settings like tests sequence, VA scale, chair distance or language can be memorized. YANG can print reports via an USB device or via an Ethernet connection directly to a net printer.

**19 display":** Innovation and the most advanced technology are the basis of a stable and reliable LCD system that visualizes the charts without any distortion or flickering. A special device measures the environmental luminance and modifies the LCD luminance accordingly, this technology is mandatory to keep the exam parameters constant in time. Thanks to this accurate calibration YANG features the highest quality and precision available in the vision tester field.

**Remote Controller:** The user friendly and innovative remote is ergonomically structured so that the user becomes comfortable in minutes. A clear backlit display provides on the remote all the information the user needs while operating YANG, giving also contextual directions about the test currently in execution.

**Design:** The design has been studied in order to fulfil the highest standards in functionality, compactness, solidity and aesthetic.



### Technical specifications

Main Unit	
Monitor	19" LCD
Resolution	1280x1024 pixel
Colour visualization	24 bit, 16,8 million colours
Operative System	Windows® XP Embedded
Hardware	VIA C7 1500MHz Processor
Input/output	CD-DVD
Calibration	Environmental light, white balance (ICM profile), Red-Green calibration
Working Distance	0,3 – 9m
Size (l x h x p)	465x395x95mm
Weight	6kg
Power consumption	100W
Power Supply	110-240V; 0.5A max; 50-60Hz
Operating Temperature	14°C-40°C
Wall mount	Adjustable
Remote controller	
Transmission	Bi-directional infrared light (IR)
Display	Backlit LCD Display
Size	175x70x25mm
Weight	220g
Polarization	Cristal Liquid Goggles
Software	
Language selection	Programmable
Log in	Single or Multi User
ETDRS	Standard @ 2,1m (with score report)
Contrast sensitivity	Letters and sinus
VA scale	10 + custom for test
Media	Embedded Media player
Test management	Tests and Groups customization
Options	
Red/Green goggles	Included
Polarized LCD goggles	Option
Desk support	Option
Regulatory	
CE marking: Compliant to 93/42/EEC directive (class I).	
Conform following technical standards:	
<ul style="list-style-type: none"> <li>• Safety: EN60950-1</li> <li>• EMC: EN61000-3-2, EN61000-3-3, EN55022, EN55024</li> </ul>	



*Tests List*

<b>Main Tests</b>	<b>Additional Tests</b>	<b>Single Tests</b>
Single character	Contrast Sensitivity	Red – Green
Snellen Letters	Ishihara plates	Dichromatic balance
Snellen Random Letters	Grating [Square Bars]	Forie ( H/V )
Sloan Letters	Grating [Sinusoid. bars]	Worth diamonds
Sloan Random Letters	Grating [Checkerboard]	Schöber test
Numbers	Stereo Test	Bright Letters (H/V)
Kids images	ETDRS: Refraction	Lancaster Parallel
Pre-school	ETDRS: Right eye	Lancaster Radial
Clock	ETDRS: Left eye	Adults grid
Geometric figures 1	ETDRS: Random	Kids grid
Geometric figures 2		Point Astigmatism
Tumbling E		Fan & Block
Landolt rings		Amsler grid
Number chart		
Sloan chart		
Snellen chart		

*Producer, Distributor and Customer Service*

SIFI Diagnostic S.P.A. Via Castellana, 70/e - 31100 Treviso  
 Tel. +39.0422.24.77.01  
 Fax +39.0422.26.31.80  
[www.sifidiagnostic.com](http://www.sifidiagnostic.com)

*The producer can change, modify or update the product any time without notice, supplying a substitutive product, a modified version of the product or an update, setting a price for this substitution, modification or update.*

