

## Vision Screener



reddot award 2014  
winner



### Short Manual 6

**“Documenting measurement results electronically”**

Plusoptix GmbH  
Neumeyerstrasse 48  
90411 Nuremberg  
Germany  
[www.plusoptix.com](http://www.plusoptix.com)

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This manual is a supplementary short manual. For important information about your Plusoptix device, such as its intended use, basic handling, technical information, maintenance, service, and warranty information, please refer to the user manual that was delivered with your device. This user manual can also be downloaded on our homepage ([plusoptix.com](http://plusoptix.com)), under support.

## List of further supplementary short manuals

1. Checking the scope of delivery and learning about the device
2. Adjusting settings and setting up WLAN
3. Preparing and performing a measurement
4. Viewing the measurement results
5. Entering, retrieving or deleting patient data
6. Documenting measurement results electronically
7. Documenting measurement results on paper
8. Exporting back-ups and reports (only plusoptiX S12C and S16)
9. Downloading software updates
10. Troubleshooting malfunctions and measuring interruptions

## 1 Documenting measurement results – an overview

The measurement results can be documented electronically or on paper.

### Electronic documentation

Documenting electronically means that you can save screening reports (see figure 1) on your workplace computer and also attach them manually to your electronic patient records.

If the device is connected to your Electronic Medical Record system for csv data exchange, the screening report and the measurement values can even be saved automatically to your Electronic Medical Record system (refer to chapter 2.3 “Accessing the screening report”).

### Documentation on paper

Documenting on paper means that the measurement results can be printed out to attach them to a patient paper record. You can print a self-adhesive label on the wireless infrared label printer “plusoptix P12” or a screening report on any printer that is connected to your workplace computer. With the “plusoptiX S12C / S12R” model, it is also possible to print the screening report directly on a mobile USB printer, without using a workplace computer.

More information about the documenting the measurement results on paper can be found in short manual 7.

## 2 Documenting the measurement results electronically

Touch the printer (1) button in the navigation bar of a results page to do this.

In the “plusoptiX S12C” and “plusoptiX S16” model, the patient data input screen is then displayed. Enter the patient data (see supplementary short manual 5), which should be displayed on the screening report and then touch the green checkmark (2) to confirm.

If the measurement results are to be documented anonymously, touch the checkmark (2) in the navigation bar without entering patient data. This will allow you to skip the patient data entry screen. The device then saves the measurement under a consecutive patient ID. This is composed as follows:

<last 4 digits of the serial number>-<consecutive number>-<date>-<time>



### **Note:**

The “plusoptiX S12R” model does not have an internal patient database. Touching the printer button after the measurement in the “plusoptiX S12R” model will display a single line to enter individual patient data. This data will be portrayed on the screening report and on the self-adhesive label.

After confirming the patient data entry or the anonymous, consecutive patient ID (see supplementary short manual 4), a print job for label printing is sent via the infrared interface and a screening report is saved to the inserted SD card (plusoptiX S12) or USB stick (plusoptiX 16) at the same time.



## 2.1 Saving screening reports



**Attention:**

Screening reports can no longer be called up in the internal patient database at a later point in time. Save the screening report by adding it to your patient record or transferring it to your network computer (see 2.3 “Accessing the screening report”).



**Attention:**

Saving the screening report takes a few seconds and depends on the storage medium. If the SD card or USB stick is removed too soon or the URL is called up too early, the PDF file will not be saved.

The SD card or USB stick must then be reinserted in the device in order to save the screening report again on the SD card or USB stick. If the URL was called up too early, it must be called up again.

The screening report is used to document the measurement values and the last camera image. Depending on the time of entering patient data, the screening report is saved automatically or manually:

Time of entry	Storage of the screening report
Entry or Retrieval of patient data before the measurement (only S12C und S16)	The screening report is automatically saved as a PDF file at the end of every successful measurement. If you see the status message “Try again”, the screening report must be saved manually.
Entry or Retrieval of patient data after the measurement (only S12C und S16)	After the confirmation of patient data, the screening report is automatically saved as a PDF file at the end of every successful measurement.
No entry of patient data, documentation via patient ID number	The screening report is saved after entering or retrieving the patient ID as well as after confirmation of the anonymous, consecutive patient ID number.

To be able to allocate these screening reports to individual patients, the entered patient information can be found in the file names. In addition to the entered data, a date and time stamp and the measurement result are added.

PDF file name:

Last name\_FirstName-YYYYMMDD-HHMMSS-(refer/pass/inconclusive).pdf

Patient information

### Vision screening report

**Emily**  
First name:

**Smith**  
Family name:

\_\_\_\_\_  
Patient ID:

**06/24/2015**  
Date of birth:

**emily@smith.com**  
Contact information:

**Nuremberg**  
Location:

**01/23/2018**  
Date of measurement:

OD		OS
	<b>Refraction</b> [dpt] +3.75 -2.50 1° +3.25 -2.75 175° <b>Spherical equivalent</b> [dpt] +2.50 +1.75 <b>Gaze asymmetry</b> [°] 42 <b>Pupil diameter</b> [mm] 5.5 5.6 <b>Pupil distance</b> [mm] 65	

	Screening result
Anisometropia	
Astigmatism	Cylinder $\geq 0.75$ dpt
Hyperopia	Spherical equivalent $\geq 1.00$ dpt
Myopia	
Gaze asymmetry	
Anisocoria	
Refer	

ROC 1, Ver. 7.0.4.0  
Vision screening does not replace a complete eye examination by an ophthalmologist or optometrist. Vision screening must be conducted regularly as eyes may change over time! Children with screening result "Refer" should be referred to an ophthalmologist or optometrist.

This refraction was measured with Plusoptix.  
**plusoptix.com**

info.png  
2200 x 570 pixels

Figure 1: Example of a screening report (Letter-sized or DinA4)



**Note:**

If a patient ID has been entered instead of or as well as the patient name, this patient ID will be visible in the file name instead of the patient name

## 2.2 Adding an individual infographic

An infographic is found on the lower edge of the screening report. You can design this as you wish. Create your graphic in png format with a size of 2200 x 570 pixels (w x h) and call your graphic "info". Copy your graphic into the main directory of a USB stick. As soon as you connect the USB stick to the operational device, your graphic will be uploaded automatically. You can find a sample graphic with the correct measurements for the information column in the download area on our homepage (plusoptix.com).

## 2.3 Accessing the screening report

After saving the screening report to the SD card (plusoptiX 12) or USB stick (plusoptiX 16), there are three different options to electronically access them:

- a) Manual connection of the SD card or USB stick to a workplace computer
- b) Manual LAN / WLAN network access (only S12C and S16)
- c) Automated connection with the freeware plusoptiXconnect (only S12C and S16)

Following, please find detailed explanations.

## a) Manual connection of the SD card or USB stick to a workplace computer

Connect the SD card (plusoptiX S12C / S12R) or USB stick (plusoptiX S16) to a workplace computer. The storage will be displayed as “removable medium” in your Windows Explorer or Apple Finder.

Open the folder “pdf” and choose the screening report you want save. You can copy it to any folder on your workplace computer or in the network.

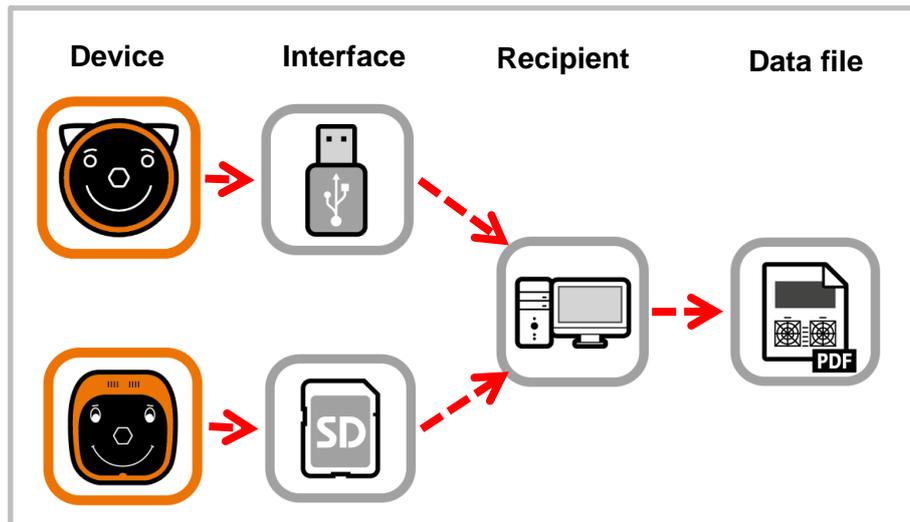


Figure 2: Manual connection of the storage device to a workplace computer

## b) Manual LAN / WLAN network access (only S12C and S16)

Open your Windows Explorer or Apple Finder. You can access the screening report at following URLs:

plusoptiX S12C:                    \\px12-xxxx\pdf (Windows Explorer)  
 (WLAN)                                smb://px12-xxxx/pdf (Apple Finder)

plusoptiX S16:                    \\px16-xxxx\pdf (Windows Explorer)  
 (LAN and WLAN)                    smb://px16-xxxx/pdf (Apple Finder)

The “xxx” place marker stands for the last four numbers of the serial number.

Choose the screening report you want save. You can copy it to any folder on your workplace computer or in the network.



### Note:

If the workplace computer displays the error message “Access denied”, restart Windows Explorer or Apple Finder.

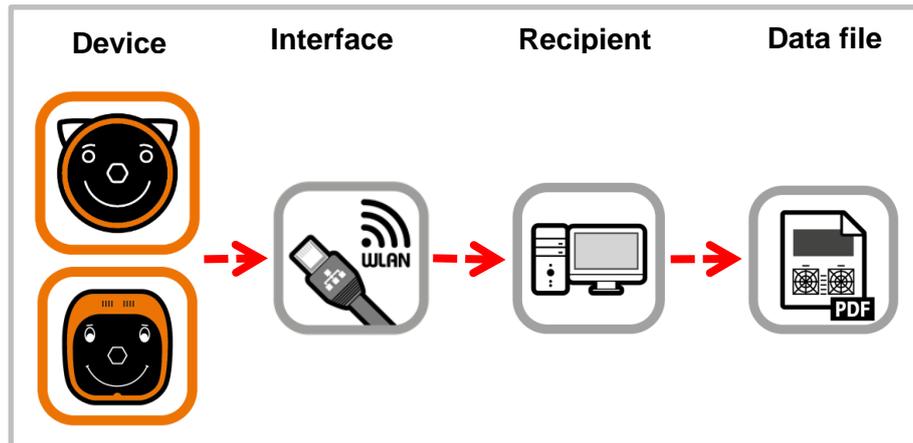


Figure 3: Manual LAN / WLAN network access

### c) Automated connection with the freeware plusoptiXconnect (only S12C and S16)

“plusoptiXconnect” is a freeware programme for automated connection and printing of screening reports. device must be connected to the network via LAN / WLAN, too. The screening reports stored on the SD card (S12C) or USB stick (S16) can now be portrayed, filtered and printed automatically on your workplace computer.

You can download the freeware and its user manual from our homepage ([plusoptix.com](http://plusoptix.com)), under support.

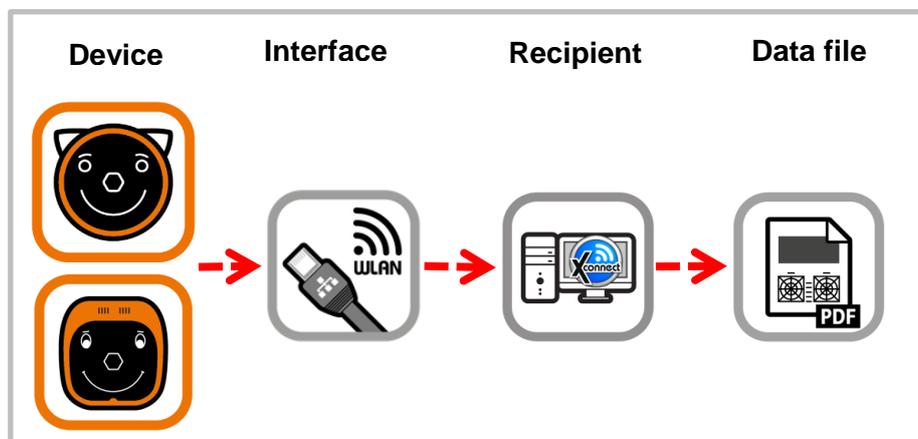


Figure 4: Automated connection with the freeware plusoptiXconnect

### 3 Full integration with your EMR system (only S12C and S16)

As an alternative to manual entry of the patient data, the “plusoptiX S12C” and “plusoptiX S16” can also be connected for a full integration (including automatic screening report printing) with your EMR system.

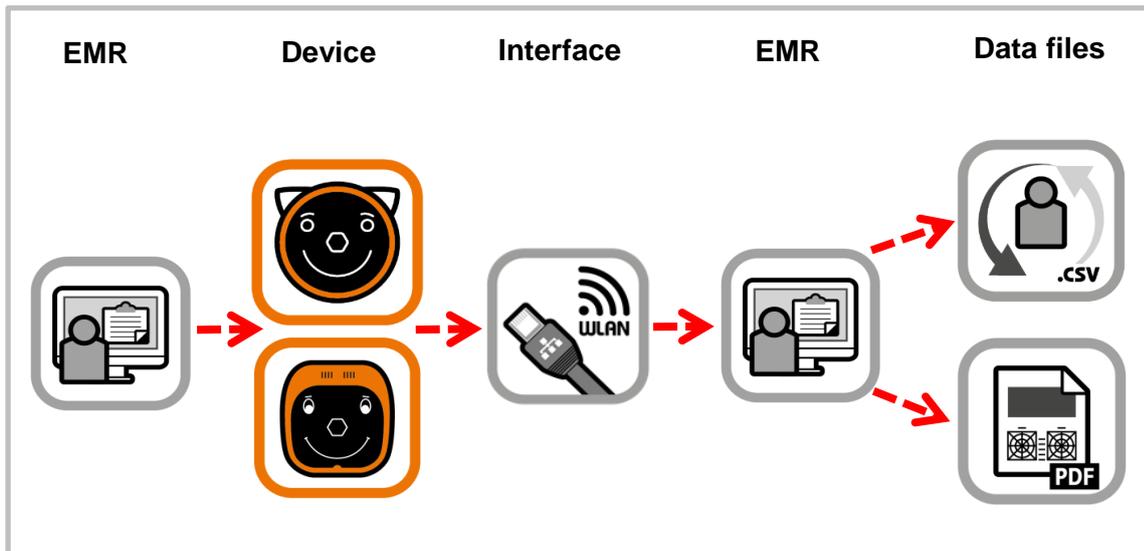


Figure 5: Automated connection to your Electronic Medical software

You simply have to choose a patient in your EMR system, and transfer the data to the device. After the measurement, the measurement results and the screening report will be retransferred and saved to your EMR system.

The screening report can be printed on any printer that is connected with your network or workstation computer.

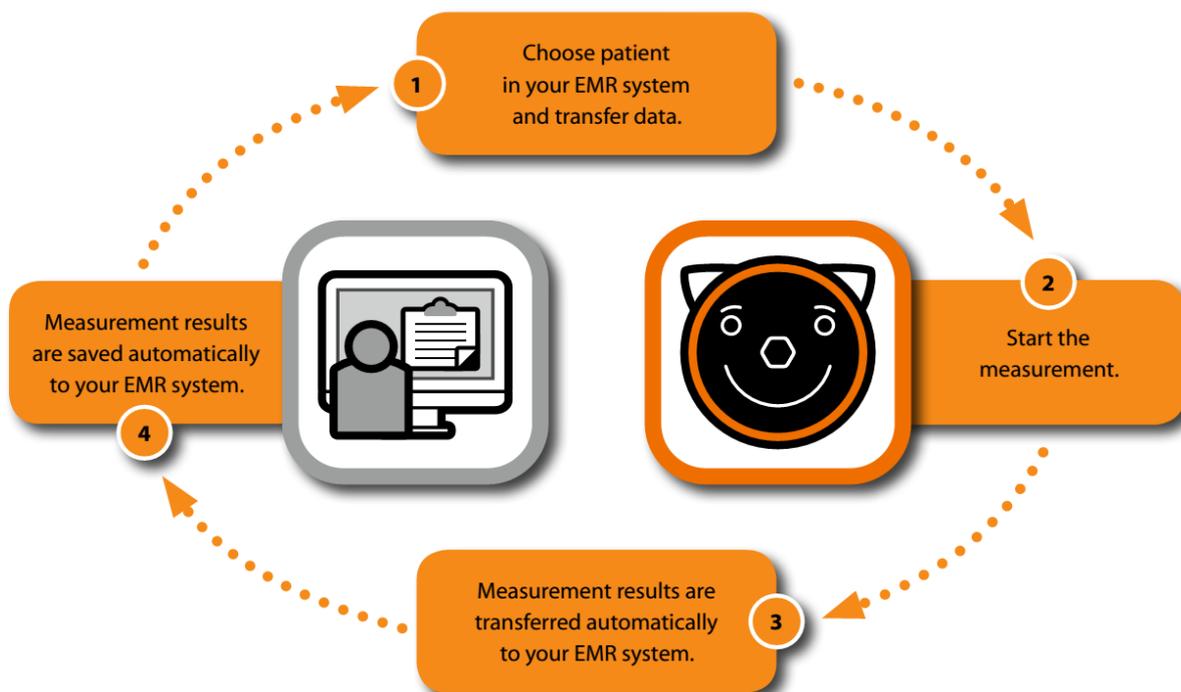


Figure 6: Automated transfer of patient data and measurement results

More information about csv file based EMR interface can be found on our homepage ([plusoptix.com](http://plusoptix.com)), under support.