

eXport

PC Software for

WireXpert

Version: WireXpert4500\_eXport\_IT\_EN\_U\_202002

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The latest version of this manual is available in the Softing download area at: <http://itnetworks.softing.com>.

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# 1 Introduction

## 1.1 About product

Please ensure eXport has been installed into your workstation before you proceed further. Please refer to Installation Guide for detailed instructions on how to obtain and install eXport.

eXport is a software programmed to work seamlessly with WireXpert. It is designed to generate reports from test results obtained from WireXpert units or the standard OTDR \*.SOR file, and capable of exporting to the commonly used \*.CSV and \*.PDF format for data archiving. The software has undergone numerous qualitative and functional tests to ensure the latest version meets the latest industrial standards and trend requirements.

Starting from v8.0, eXport PC software implemented a new feature to allow the software to connect to eXport Cloud, a cloud-based solution to upload hierarchical label list for technicians to download, and download project files technicians uploaded from site. The conventional way of travelling up and down office to transfer data can now be done on-the-go with any Wi-Fi or mobile hotspot connection. The time spent on travelling to the office to transfer files, can now be utilized to perform more work on other projects, thus improving work productivity.

This manual will only contain information and instructions on how to use eXport software. Please refer to User Manual and Guides for WireXpert for device help.

## 1.2 Safety precautions



### Read this manual before starting

For damages due to improper connection, implementation or operation Softing refuses any liability according to our existing warranty obligations.



### Note

This symbol is used to call attention to notable information that should be followed during installation, use, or servicing of this device.



### Hint

This symbol is used when providing you with helpful user hints.



### CAUTION

Selection of option may cause all or partial of saved data and/or settings in the device to be erased or restored to non-reversible original factory state. Backing up of saved result(s) is recommended before executing option.



**CAUTION**

CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



**WARNING**

**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury



**DANGER**

**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.

### 1.3 Intended use

WireXpert series has been designed for use in factory, process and building control. The unit must not be used in explosion hazard areas. The permissible ambient conditions given in the Technical Data must be complied with.

The faultless and safe operation of the product requires proper transport, proper storage and installation, and expert operation and maintenance in accordance with the manual.

### 1.4 About this document



**Read this manual before starting**

For damages due to improper connection, implementation or operation Softing refuses any liability according to our existing warranty obligations.

#### 1.4.1 Conventions used

The following conventions are used throughout Softing customer documentation:

Keys, buttons, menu items, commands and other elements involving user interaction are set in bold font and menu sequences are separated by an arrow	Open <b>Start</b> → <b>Control Panel</b> → <b>Programs</b>
Buttons from the user interface are enclosed in brackets and set to bold typeface	Press <b>[Start]</b> to start the application

Coding samples, file extracts and screen output is set in Courier font type	MaxDlsapAddressSupported=23
Filenames and directories are written in italic	Device description files are located in <i>C:\&lt;product name&gt;\delivery\software\Device Description files</i>

## 1.5 System requirements

### Hardware

- PC

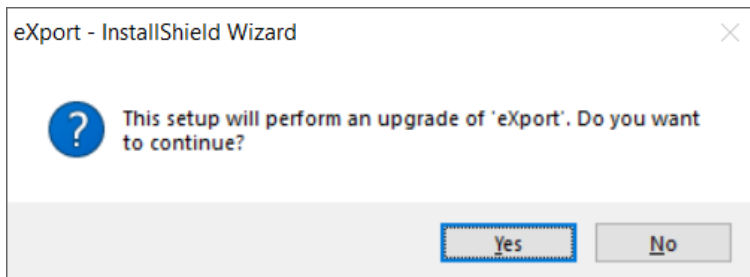
### Operating system

- Windows 8.x or 10 (32 bit or 64 bit)
- Intel Core 2 Duo, 2GHz
- 1 GB of RAM
- 200 MB of free space of installation
- Microsoft .NET framework

## 2 WireXpert PC Software and Firmware

### 2.1 Install software

- 1 Download the latest eXport PC software from <https://itnetworks.softing.com/>
- 2 Run eXport setup v8.x.x64.exe
- 3 Follow through the instructions on the screen and click [Next] to proceed.
- 4 Click **[Install]** to begin installation.
- 5 Click **[Finish]** to complete installation.
- 6 If this is an upgrade from an earlier version from 6.x and above, click **[Yes]** to proceed.



- 7 Follow the instructions to complete installation.



#### User Manuals


For more information on installation and using eXport PC software, please refer to “Installation Guide for eXport PC software” and “User Manual for eXport PC software”.




#### Note

Softing IT Networks has ceased support for ReportXpert v5.x and earlier. Please contact [asia-support.itnetworks@softing.com](mailto:asia-support.itnetworks@softing.com) for more information.

### 2.2 Upgrade firmware

- 1 Download and install the latest eXport PC software.
- 2 Connect an USB flash drive to the workstation.
- 3 Run eXport PC software.
- 4 Go to **Tools** →  **Update Device Firmware**
- 5 Click **[OK]** and select USB drive from “Export to USB” window.
- 6 Click **[Export]** and **[OK]** to proceed.
- 7 Please wait while exporting takes place. This process may take a while.
- 8 Remove USB flash drive from workstation and connect to WireXpert.
- 9 Select **[Upgrade Firmware]** from prompt and click **[OK]** button to continue.



- 10 If prompt did not appear, check that  USB icon is present on the status bar, and press the **SETUP** button → **System Settings 2** → **Settings 2** → **Storage** → **USB**.
- 11 Please wait while upgrading takes place. This process may take a while.
- 12 Upgrade process is complete.

**CAUTION**

Saved test results and settings may be erased during upgrading. You are recommended to save all test results before upgrading the firmware.

**Note – Upgrading from eXport <7.3**

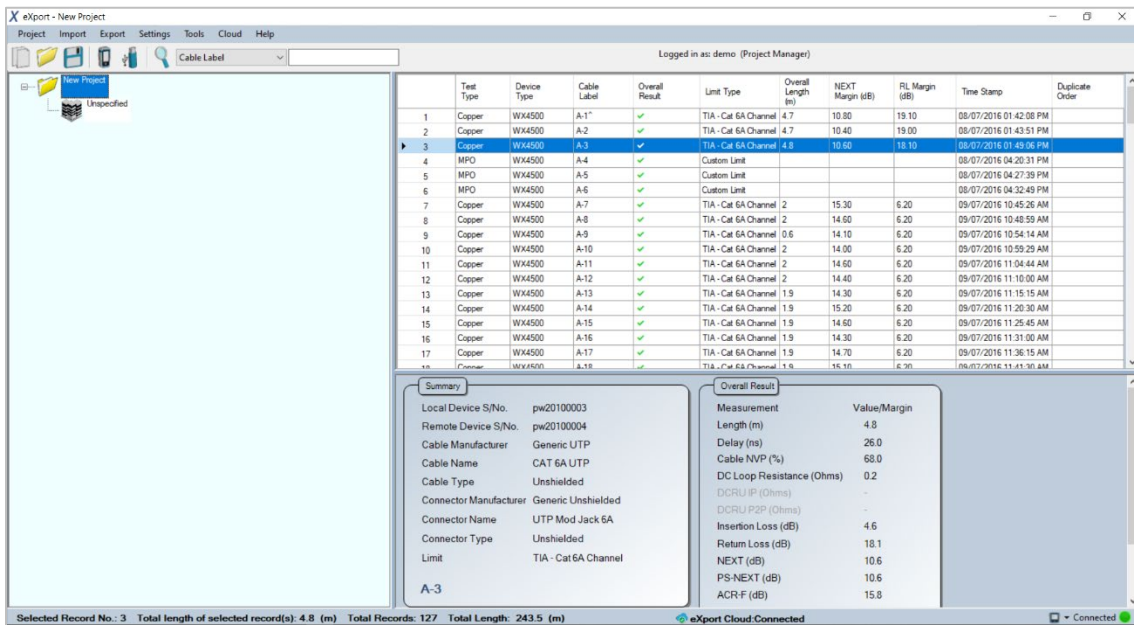
eXport 7.x has upgraded its database structure and added new features such as the Re-certification function. You are recommended to perform a clean installation of the software by uninstalling the existing 6.x software before installing the 7.x version.

## 2.3 Running the Program

- 1 Double click on the “eXport” shortcut icon on your desktop or go to the **Start Menu** → **Softing IT Networks** → **eXport**.
- 2 The program will start with the version/build number indicated.

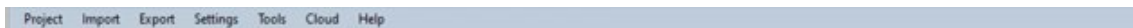


## 2.4 The User Interface

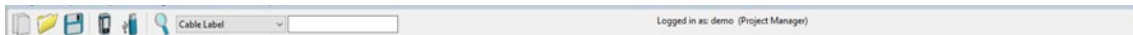


The software’s User Interface is divided into a few segments;

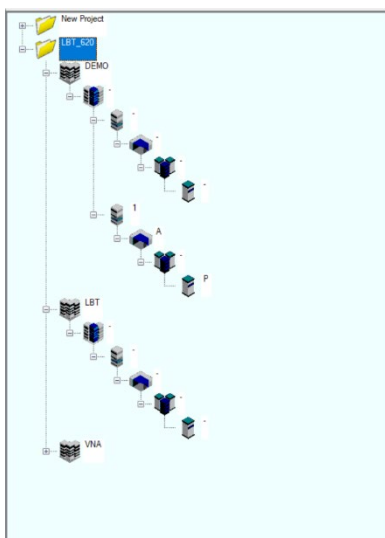
1. Main menu bar – The menu bar displays commands and configurations to execute the software.



2. Shortcut bar – The shortcut bar provides quick access to the more commonly access commands such as new, open and save project, import from device and USB, and search. Starting from v8.0, eXport has integrated the Cloud feature. The shortcut bar will indicate the user ID of the user that is currently logged in. This will only be available when eXport is connected to the network.



3. Preview pane – Or the tree-view pane, displays the projects in a hierarchy manner when selection(s) are expanded. Select to display the results that are available on that tier.



4. Results pane – Or the grid-view pane, lists the saved results that were imported from WireXpert.

Test Type	Device Type	Cable Label	Overall Result	Limit Type	Overall Length (m)	NEXT Margin (dB)	RL Margin (dB)	Time Stamp	Duplicate Order
1	Copper	WX4500	A-1	✓	TIA - Cat 6A Channel	4.7	10.60	19.10	08/07/2016 01:42:08 PM
2	Copper	WX4500	A-2	✓	TIA - Cat 6A Channel	4.7	10.40	19.00	08/07/2016 01:43:51 PM
3	Copper	WX4500	A-3	✓	TIA - Cat 6A Channel	4.8	10.60	18.10	08/07/2016 01:49:26 PM
4	MPO	WX4500	A-4	✓	Custom Limit				08/07/2016 04:20:31 PM
5	MPO	WX4500	A-5	✓	Custom Limit				08/07/2016 04:27:39 PM
6	MPO	WX4500	A-6	✓	Custom Limit				08/07/2016 04:32:49 PM
7	Copper	WX4500	A-7	✓	TIA - Cat 6A Channel	2	15.30	6.20	09/07/2016 10:45:26 AM
8	Copper	WX4500	A-8	✓	TIA - Cat 6A Channel	2	14.60	6.20	09/07/2016 10:49:59 AM
9	Copper	WX4500	A-9	✓	TIA - Cat 6A Channel	0.6	14.10	6.20	09/07/2016 10:54:14 AM
10	Copper	WX4500	A-10	✓	TIA - Cat 6A Channel	2	14.00	6.20	09/07/2016 10:59:29 AM
11	Copper	WX4500	A-11	✓	TIA - Cat 6A Channel	2	14.60	6.20	09/07/2016 11:04:44 AM
12	Copper	WX4500	A-12	✓	TIA - Cat 6A Channel	2	14.40	6.20	09/07/2016 11:10:00 AM
13	Copper	WX4500	A-13	✓	TIA - Cat 6A Channel	1.9	14.30	6.20	09/07/2016 11:15:15 AM
14	Copper	WX4500	A-14	✓	TIA - Cat 6A Channel	1.9	15.20	6.20	09/07/2016 11:20:39 AM
15	Copper	WX4500	A-15	✓	TIA - Cat 6A Channel	1.9	14.60	6.20	09/07/2016 11:25:45 AM
16	Copper	WX4500	A-16	✓	TIA - Cat 6A Channel	1.9	14.30	6.20	09/07/2016 11:31:00 AM
17	Copper	WX4500	A-17	✓	TIA - Cat 6A Channel	1.9	14.70	6.20	09/07/2016 11:36:15 AM
18	Copper	WX4500	A-18	✓	TIA - Cat 6A Channel	1.6	15.10	6.30	09/07/2016 11:41:30 AM

5. Summary pane – displays the summary of the selected result from the results pane.

Summary		Overall Result	
Local Device S/No.	pw20100003	Measurement	Value/Margin
Remote Device S/No.	pw20100004	Length (m)	4.8
Cable Manufacturer	Generic UTP	Delay (ns)	26.0
Cable Name	CAT 6A UTP	Cable NVP (%)	68.0
Cable Type	Unshielded	DC Loop Resistance (Ohms)	0.2
Connector Manufacturer	Generic Unshielded	DCRU IP (Ohms)	-
Connector Name	UTP Mod Jack 6A	DCRU P2P (Ohms)	-
Connector Type	Unshielded	Insertion Loss (dB)	4.6
Limit	TIA - Cat6A Channel	Return Loss (dB)	18.1
A-3		NEXT (dB)	10.6
		PS-NEXT (dB)	10.6
		ACR-F (dB)	15.8








6. Status bar – displays length information of the selected test result(s). The status bar will indicate the total length if multiple results are selected. The status bar also indicates connectivity status to the device (WireXpert) and eXport Cloud.

7. Selected Record No.: 3 Total length of selected record(s): 4.8 (m) Total Records: 127 Total Length: 243.5 (m) eXport Cloud Connected Connected


## 3 Project Management

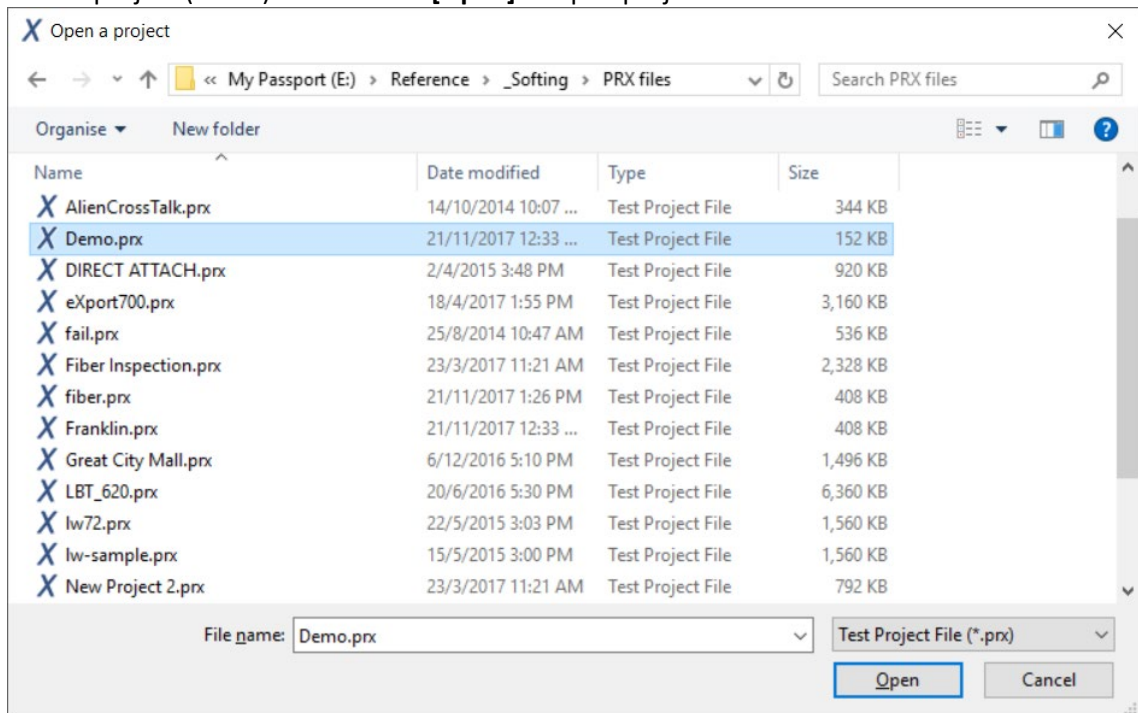
### 3.1 Project Management

#### 3.1.1 Creating a new \*.PRX project

1. Go to **Project** → **New Project** or select the  icon to create a new project.
2. Right click on the new project that is created;
  - Open containing Folder – Opens file project file is saved in.
  - Add (Sub-items to be added in hierarchical order)
  -  Site – Adds a new site to the project
  -  Building - Adds a new building sub-item to the selected site.
  -  Floor – Adds a new floor sub-item to the selected building.
  -  Room – Adds a new room sub-item to the selected floor.
  -  Rack – Adds a new rack sub-item to the selected room.
  -  Panel – Adds a new panel sub-item to the selected rack.
  - Rename – Renames the selected item.
  - Delete – Deletes the selected item.
  - Expand All / Collapse All – Expands or collapses the items and sub-items in the project.
  - Sort A to Z – Sorts opened Project files in ascending order from A to Z.
  - Close Project – Closes the selected project

#### 3.1.2 Opening an Existing Project

1. Go to **Project** → **Open Project** or select the  icon to create a new project. Locate project (\*.PRX) file and click **[Open]** to open project.



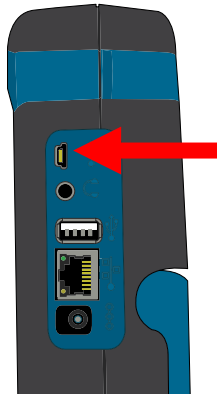


Starting from v8.1, “File” option on the menu bar has been renamed to “Project”.

## 3.2 Importing test results

### 3.2.1 From Device

1. Connect your workstation to the mini-USB port of WireXpert.



2. You may be prompted to install Microsoft Windows Mobile Device Center. Click **[Accept]** to proceed installing the necessary drivers.




3. Click on “▼” and select “Connect to Device”.

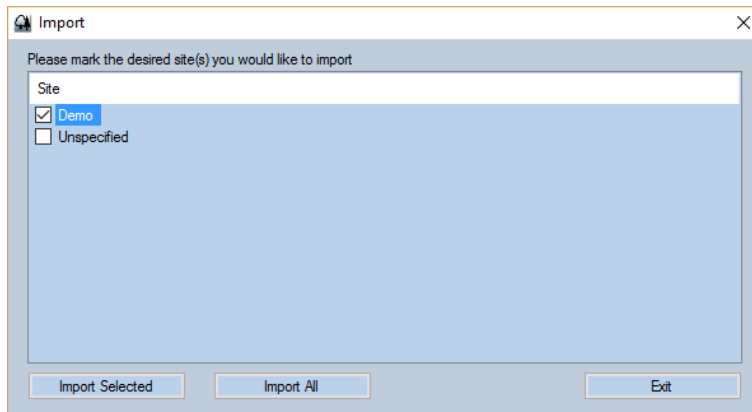


4. Status bar will indicate “● Connected” once your workstation is linked to the Device.

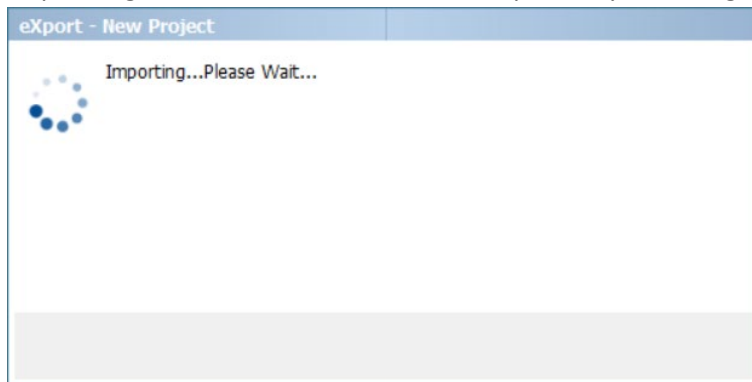


5. Open an existing or create a new project.

6. Go to **Import** → **Device** or select the  icon.
7. Select the test result(s) you wish to import and click **[Import Selected]** to proceed. Select **[Import All]** to import all test results.



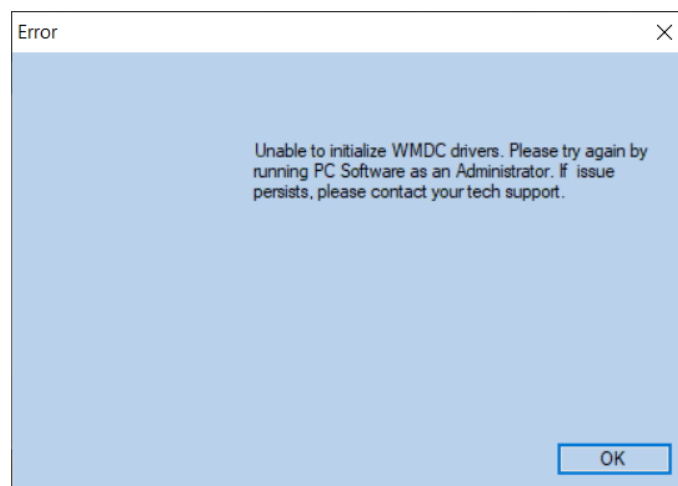
8. Depending on number of saved results, eXport may take longer to import.



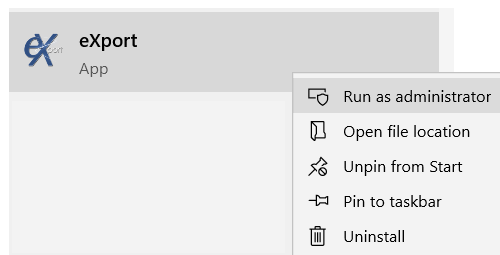
9. Status bar will indicate "● Transferring" during the import.



### Note




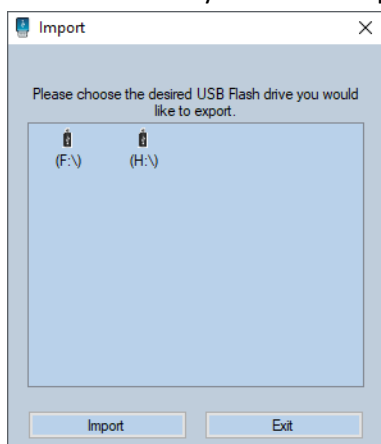
If you encounter this error after selecting "Connect to Device", please restart the software in Administrator mode. This needs to be done manually by right clicking on "eXport" on the Start menu and select "Run as administrator". eXport attempt to fix the error after the restart.



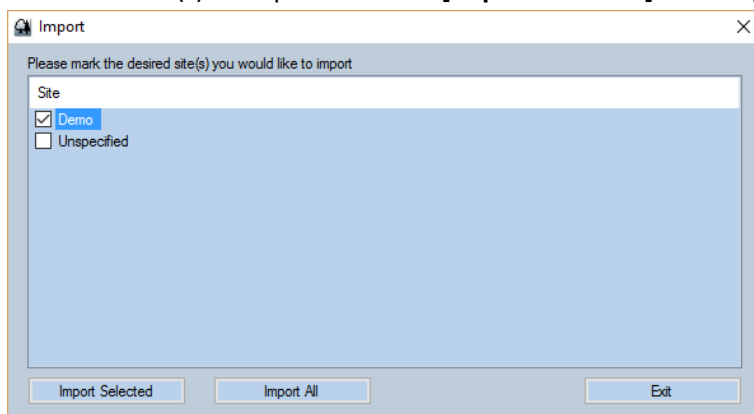
This issue is due to Microsoft has changed how services, in this case WMDC that is required to interface between WireXpert and your computer, are executed on Windows after installing a certain build of Windows Update is installed.

### 3.2.2 From USB Flash Drive

1. Go to **Import** → **Device** or select the  icon.
2. Select the Drive you wish to import the Test Result from. Click **[Import]** to proceed.



3. Select the site(s) to import and click **[Import Selected]** or click **[Import all]** to import all sites.



4. Status bar will indicate “● Transferring” during the import.



5. eXport will automatically upgrade the database if test results are imported from a previous build.

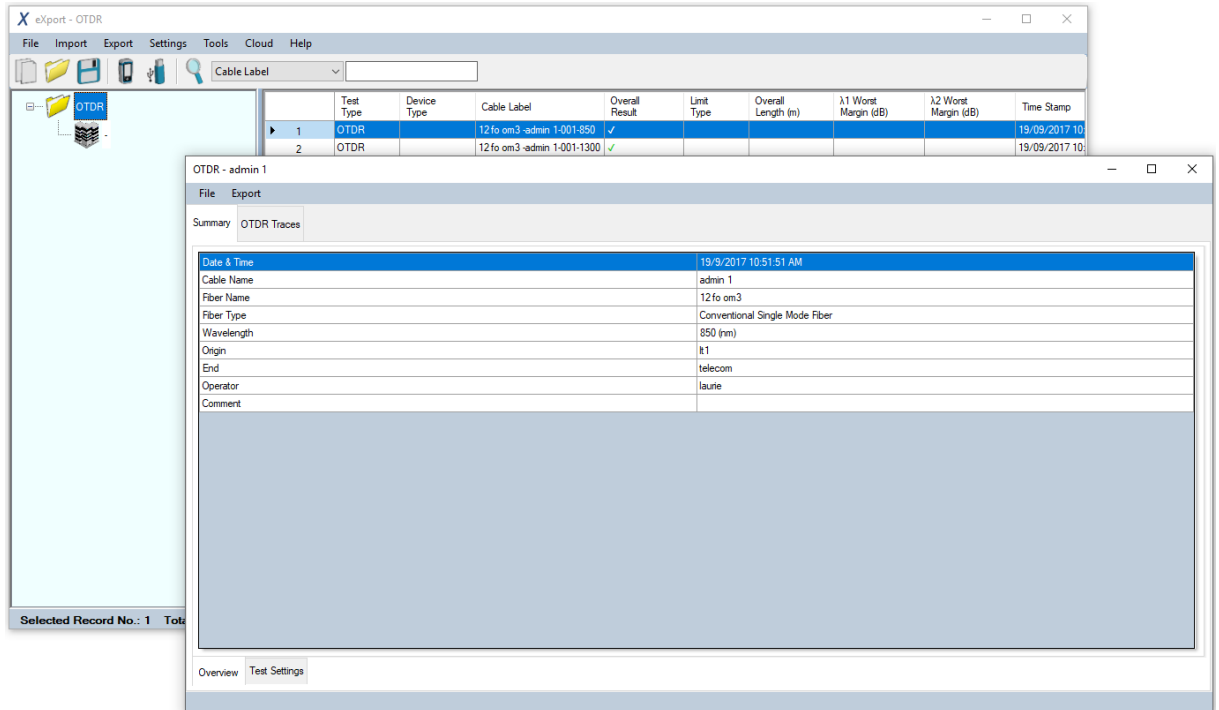
### 3.2.3 OTDR Test Results from SOR files

1. Create a new \*.PRX Project file.
2. Go to **Import** → **OTDR** to import \*.SOR files.

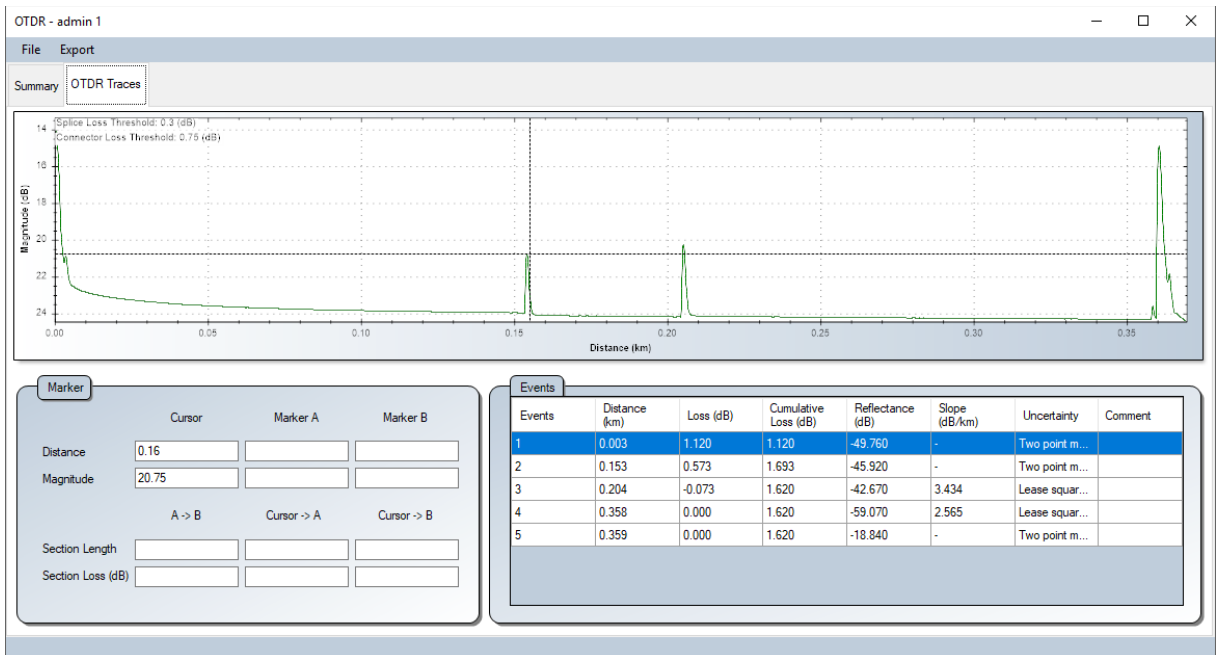
## Project Management



3. Locate the \*.SOR file and click “Open” to begin import.
4. Double click the test result to view the detail test results.



5. Move mouse cursor over chart in detailed view “OTDR Traces” to view distance over magnitude results.



### Note

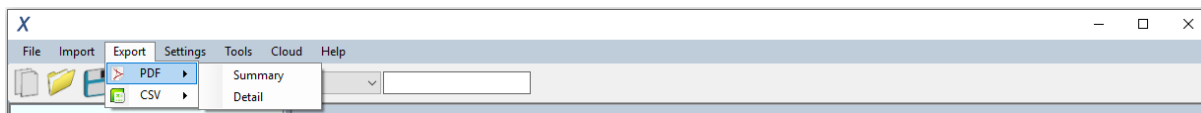


SOR file is an OTDR Trace File. An optical time-domain reflectometer (OTDR) is an optoelectronic instrument used to characterize an optical fiber. An OTDR is the optical equivalent of an electronic time domain reflectometer.

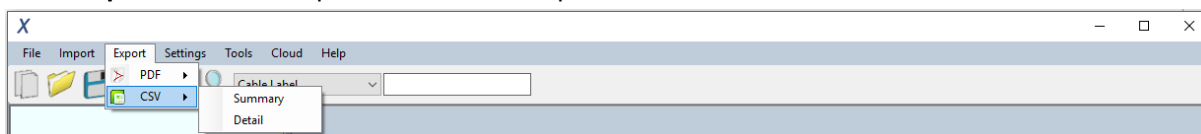
For more information on OTDR testing, search for “FiberXpert OTDR-5000” at <http://itnetworks.softing.com/>

### 3.3 Exporting test results

1. Go to **Export** → **PDF** to export selected test report in \*.PDF format.



- Go to **Export** → **CSV** to export selected test report in \*.CSV format.



- Summary – Generates summarized result(s) listing only the basic information. Generally used to tabulate report for entire project.

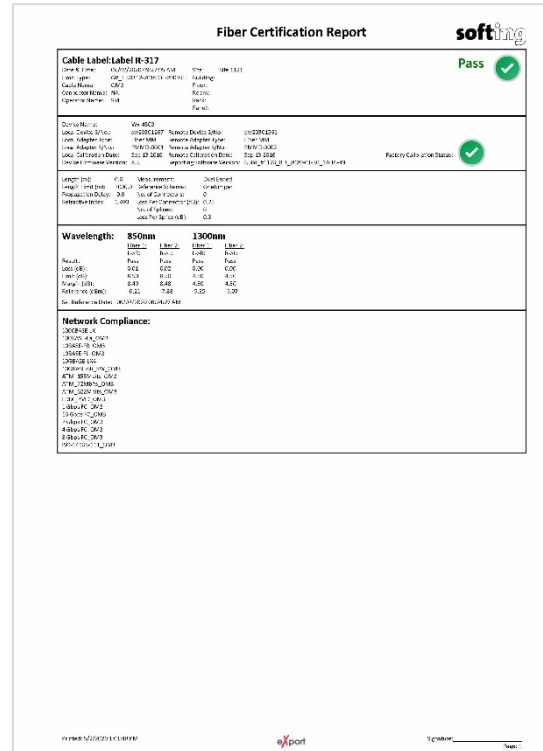
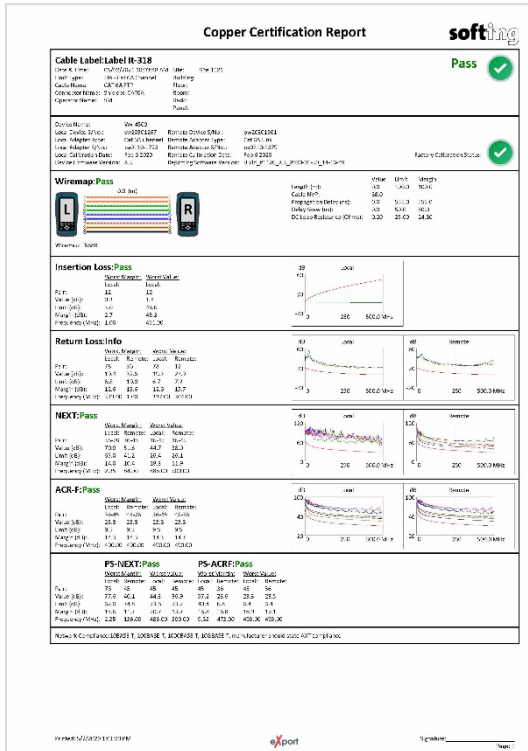
**Summary Report** **softing**

Cable Label	Limit	Result	Length (m)	Margin (dB)	Factory Calibration Status	Date & Time
CU Label It-319	TIA - Cat 6A Channel	✓	-	10.3	✓	05/02/2021 10:05:54
FX Label It-316	GB_T 50312-2016 OF-2000 CH	✓	-	8.48	Overdue!	06/02/2020 09:19:07
FX Label It-317	GB_T 50312-2016 OF-2000 CH	✓	-	8.48	Overdue!	06/02/2020 09:27:05
CU Label It-318	TIA - Cat 6A Channel	✓	-	10.4	✓	05/02/2021 10:03:48
FX Label It-310	GB_T 50312-2016 OF-2000 CH	✗	-	8.48	Overdue!	06/02/2020 08:22:18
CU Label It-357	TIA - Cat 6A Channel	✓	-	10.3	Overdue!	07/02/2021 10:41:01
FX Label It-422	Link Validation	✓	-	8.48	Overdue!	08/02/2021 04:14:32
FX Label It-421	Link Validation	✓	-	8.48	Overdue!	08/02/2021 04:14:19
FX Label It-424	Link Validation	✗	-	8.48	Overdue!	09/02/2021 09:19:14
MPO Label It-411	Custom Limit	✓	-	-		08/02/2021 02:13:34
MPO Label It-412	Custom Limit	✓	-	-		08/02/2021 02:13:40
MPO Label It-413	Custom Limit	✓	-	-		08/02/2021 02:13:45

Total for Selected Reports		Pass	Fail	Length (m)
CU	Copper	3	0	0
FX	Fiber	4	2	0
MPO	MPO	3	0	0

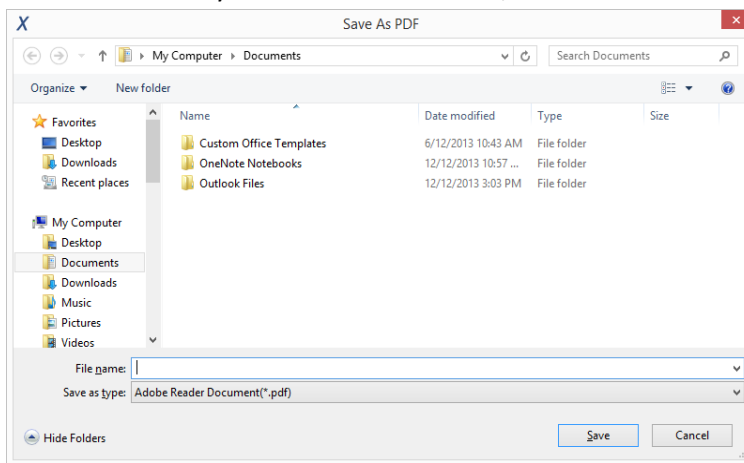
- Detail – Generates full testing result consisting of all tested parameters, plots, test settings and device information of individual point.



Typical Copper Certification Report (Detail)

Typical Fiber Certification Report (Detail)

2. Select **[Only selected result(s)]** for selected results or **[All result(s)]** for all results that has been loaded. Click **[OK]** to proceed.
3. Choose directory to save PDF or CSV file, enter file name and click **[Save]** to continue.



**Note**

When Saving Phase Data option is enabled in the Lab Options, exported CSV file can be used to generate plots for phase information.

Starting from v8.0, eXport PC software has updated the template for PDF reports. Updates includes various alignments and standardization, and indicating all non-applicable parameters with a “-”.

Starting from v8.3, the “Factory Calibration Status” of the WireXpert will be indicated on all PDF reports to remind end-users of timely calibration of their devices.

It is recommended to calibrate your WireXpert annually to ensure accurate measurements.

## 4 Data Management

### 4.1 Viewing the test results

1. After importing test results, summarized data will be displayed. Click on the Project name to display all test results. Click on the Site name to display test results saved within the site.

The screenshot shows the eXport software interface. On the left is a navigation tree with 'New Project' and 'Sample Reports'. The main area displays a table of test results:

Test Type	Device Type	Cable Label	Overall Result	Limit Type	Overall Length (m)	NEXT Margin (dB)	RL Margin (dB)	Time Stamp	
1	Copper	WX4500	001-CAT6A-TIA-Channel	✓	TIA - Cat 6A Channel	2.6	11.20	6.00	17/10/2019 10:44:57 AM
2	Copper	WX4500	002-ClassEA-ISO-Channel	✓	ISO - Class EA Channel	2.6	11.20	6.00	17/10/2019 10:46:15 AM
3	Copper	WX4500	003-CAT6A-TIA-Channel-UTP	✓	TIA - Cat 6A Channel	96.3	7.70	8.90	18/10/2019 03:13:06 PM
4	Copper	WX4500	004-CAT6A-TIA-Channel-FTP	✓	TIA - Cat 6A Channel	96.2	7.90	8.80	18/10/2019 03:14:33 PM
5	Copper	WX4500	005-CAT6A-TIA-PemLink-UTP	✓	TIA - Cat 6A Permanent Link	92.1	5.70	1.70	18/10/2019 03:17:50 PM
6	Copper	WX4500	006-CAT6A-TIA-PemLink-FTP-Fail	✗	TIA - Cat 6A Permanent Link	91.4	-	-	18/10/2019 03:20:22 PM
7	Copper	WX4500	007-ClassE-ISO-2-Connections-E2E	✓	ISO - Two Connection Class E E2E Link	70.8	10.20	3.70	18/10/2019 03:37:24 PM
8	Copper	WX4500	008-CAT8-TIA-PemLink-Fail	✗	TIA - Cat 8 Permanent Link	92.4	-4.30	-0.30	18/10/2019 03:42:33 PM
9	Copper	WX4500	009-CAT8-TIA-PemLink-MPass	✓*	TIA - Cat 8 Permanent Link	23.8	7.70	5.10	18/10/2019 03:46:49 PM
10	Copper	WX4500	010-ClassII-ISO-Channel-SFTP-Fail	✗	ISO - Class II Channel	28.8	-3.00	2.20	18/10/2019 04:15:04 PM
11	Copper	WX4500	011-ClassII-ISO-Channel-SFTP	✓	ISO - Class II Channel	30.6	8.70	4.30	18/10/2019 04:32:55 PM
12	Copper	WX4500	012-CAT6APlus-TIA-Channel-ShieldIntegrity-MPass	✓*	TIA - Cat 6A Channel	6.2	6.80	11.80	18/10/2019 05:11:31 PM
13	Copper	WX4500	013-CAT6APlus-TIA-Channel	✓	TIA - Cat 6A Channel	6.2	6.70	11.80	18/10/2019 05:16:19 PM

Below the table is a 'Summary' panel for the selected record (004-CAT6...annel-FTP):

- Local Device S/No: pw20201257
- Remote Device S/No: pw20100090
- Cable Manufacturer: Generic Shielded
- Cable Name: CAT 6A FTP
- Cable Type: Shielded
- Connector Manufacturer: Generic Shielded
- Connector Name: Shielded CAT6A
- Connector Type: Shielded
- Limit: TIA - Cat 6A Channel

The 'Overall Result' panel shows various measurements:

- Length (m): 96.2
- Delay (ns): 506.0
- Cable NVP (%): 68.0
- DC Loop Resistance (Ohms): 16.40
- DCRU In Pair (Ohms): -
- DCRU P2P (Ohms): -
- Insertion Loss (dB): 41.5
- Return Loss (dB): 8.8
- NEXT (dB): 7.9
- PS-NEXT (dB): 9.1
- ACR-F (dB): 8.9
- PS-ACRF (dB): 11.3
- ACR-N (dB): -
- PS-ACRN (dB): -



#### Legend

✓ Pass

✓\* Marginal Pass

✗ Fail

✗\* Marginal Fail

2. Double click to view more comprehensive information of the test result.

The screenshot shows a detailed view of a test result for a crossover cable. The title is 'Copper - 019-CAT6APlus-100BaseTX-CrossOver'. The interface includes a 'Summary' bar with various test parameters and their status (Pass, Marginal, Fail).

The main area shows a diagram of the test setup with a 'Local' device (pw20201257) and a 'Remote' device (pw20100090) connected by a cable. The cable length is 6.2 m and the delay is 31.0 ns. The overall result is 'Pass'.

Below the diagram is a table of test results:

Pass/Fail	Measurement	Margin (dB)
✓	Insertion Loss	2.1
✓	Return Loss	5.8
✓	NEXT	15.9
?	PS-NEXT	-
?	PS-ACRF	-
?	ACR-N	-
?	PS-ACRN	-

At the bottom right, there is a color-coded diagram of the crossover cable wiring, showing the connections between the two ends of the cable.

## Data Management

The 'Overview' tab displays the summary of the selected results.

The screenshot shows the 'Overview' tab of the Copper software. The window title is 'Copper - 019-CAT6APlus-100BaseTX-CrossOver'. The top menu bar includes 'Project', 'Export', and 'Settings'. Below the menu bar is a toolbar with various test parameters: Summary, Insertion Loss, Return Loss, NEXT, PS-NEXT, ACR-F, PS-ACRF, ACR-N, PS-ACRN, Length & Delay, Resistance, NEXT Locator, RL Locator, and Plots Overview. The main area contains a table with the following data:

Cable Label	019-CAT6APlus-100BaseTX-CrossOver
Limit	100BASE-TX
Site	REPORTS
Cable Manufacturer	Generic Shielded
Cable Name	CAT 6A FTP
Cable Type	Shielded
No Of Pairing	P12 P36 P45 P78
Cable Pairing	T568B
Connector Manufacturer	Generic Shielded
Connector Name	Shielded CAT6A
Connector Type	Shielded CAT6A
Operator	BRYAN

At the bottom of the window, there are tabs for 'Overview', 'Test Settings', 'Test Probes', 'Test Options', and 'Crossover'. The 'Overview' tab is currently selected.

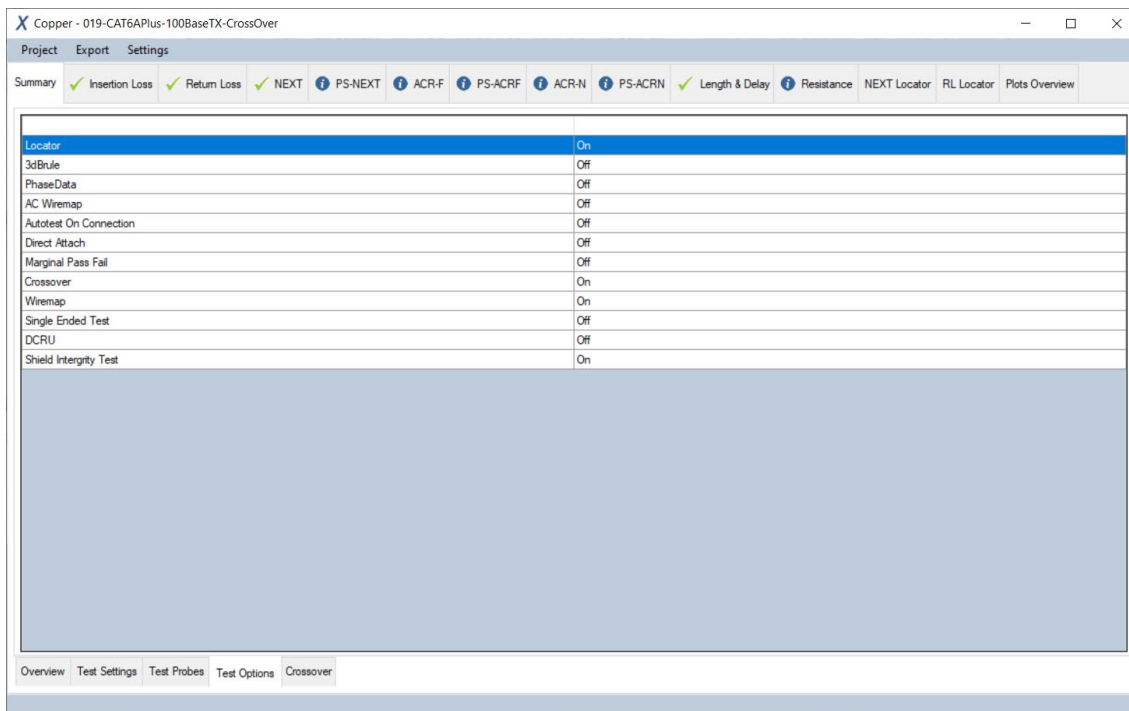
The 'Test Settings' tab displays the configurations used for the selected results.

The screenshot shows the 'Test Settings' tab of the Copper software. The window title is 'Copper - 019-CAT6APlus-100BaseTX-CrossOver'. The top menu bar and toolbar are identical to the 'Overview' tab. The main area is divided into two columns: 'Local' and 'Remote'. Each column contains a table with the following data:

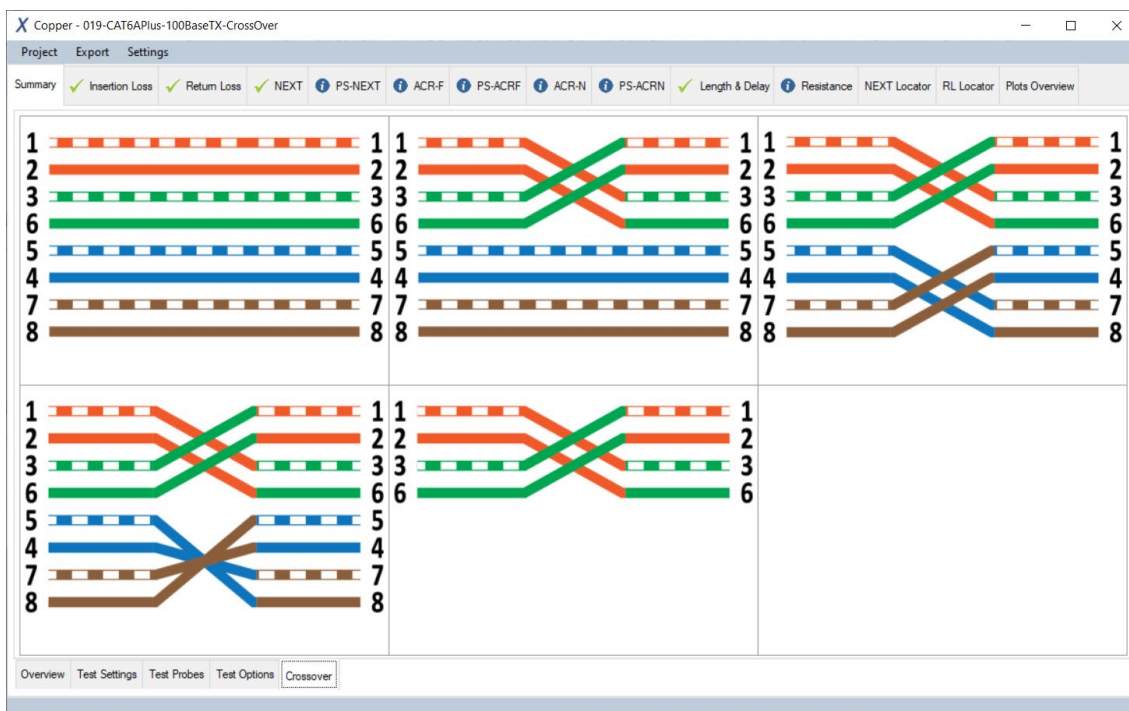
Local		Remote	
Local Device S/No.	pw20201257	Remote Device S/No.	pw20100090
Software Ver.	8.1	Software Ver.	8.1
Local Calibration Date	1/11/2017	Remote Calibration Date	21/9/2017
Probe Ser. No.	MKTG-8	Probe Ser. No.	MKTG-0014
Probe Name	Cat 6A+ Channel	Probe Name	Cat 6A+ Channel
Test Count	253	Test Count	132

At the bottom of the window, there are tabs for 'Overview', 'Test Settings', 'Test Probes', 'Test Options', and 'Crossover'. The 'Test Settings' tab is currently selected.

The 'Test Probe' tab displays information on the hardware used to obtain the results.



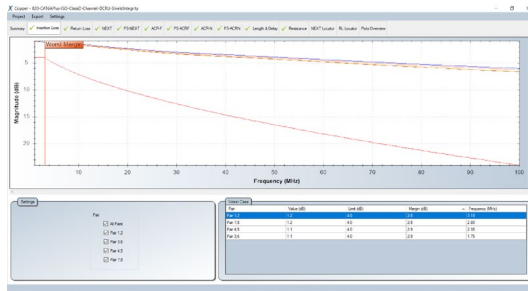
The 'Test Options' tab display the additional test options configured in WireXpert.



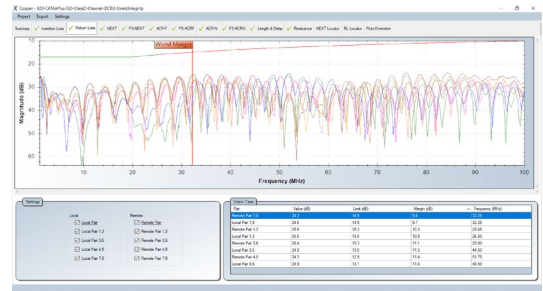
The 'Crossover' tab displays the crossover wiremaps that are selected and can be used for testing.

3. Click on the individual tab to display plots, worst marker and other detailed information. Use the scroll wheel of the mouse on the plots to zoom in/out the results, and right click for more in-plot options.

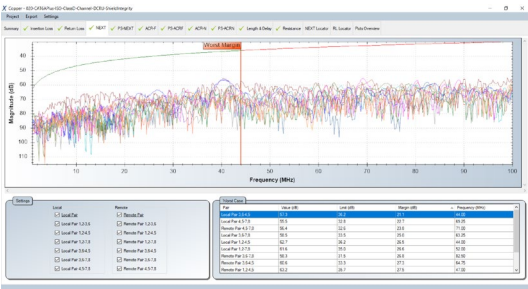
# Data Management



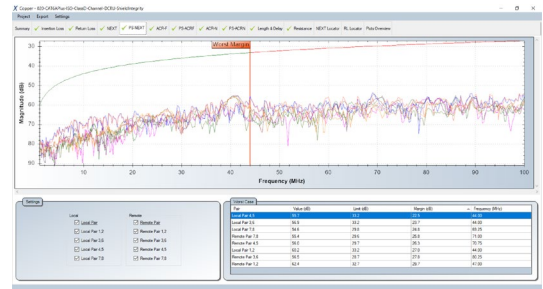
Insertion Loss



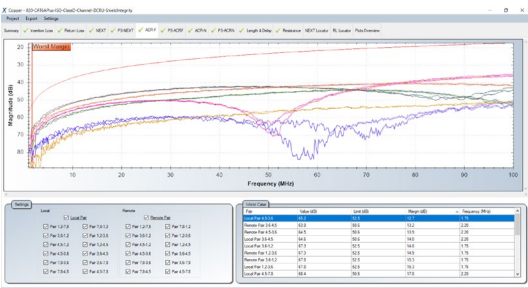
Return Loss



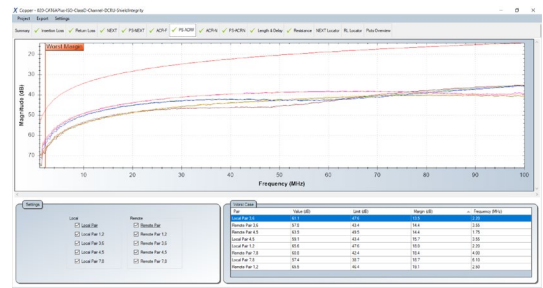
NEXT



PS-NEXT



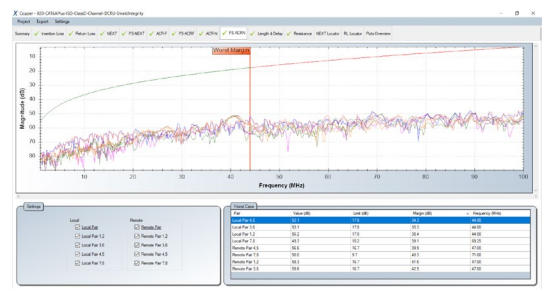
ACR-F



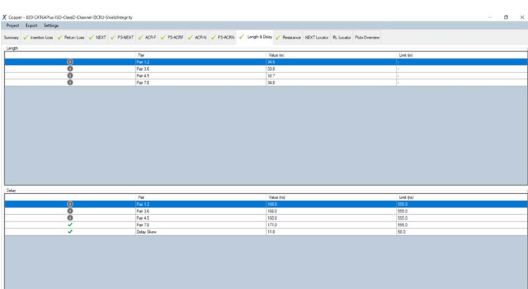
PS-ACR-F



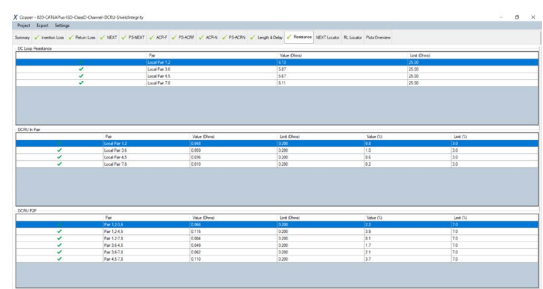
ACR-N (ISO only)



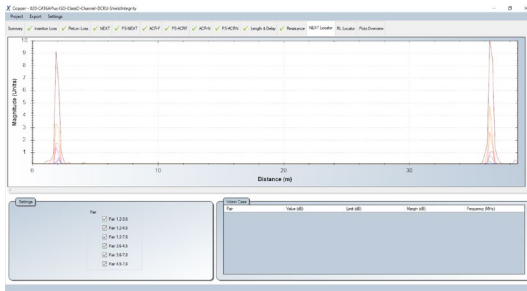
PS-ACR-N (ISO only)



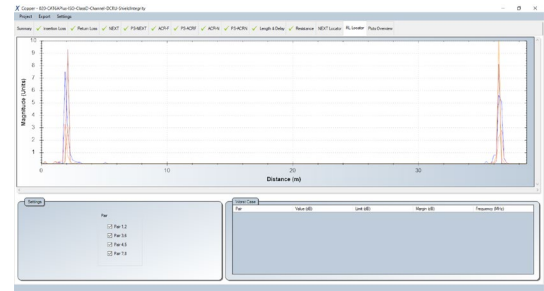
Length & Delay



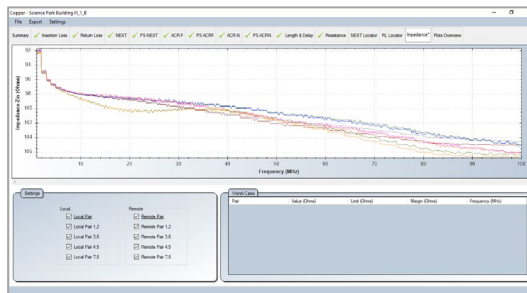
Resistance



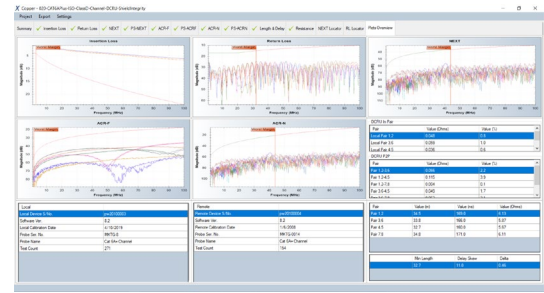
NEXT Locator



RL Locator



Impedance



Plots Overview



### DCRU measurements

Starting from v8.1, if DCRU measurement option is enabled when used with the CAT6A+ adapters, eXport will display the DCRU in pair and DCRU P2P (Pair-to-Pair) measurement in the Resistance tab. Depending on the limits selected, test parameter will be marked with a “i” to denote for information only if DCRU measurements are not required.

#### 4.1.1 Inverting Y-Axis

1. Go to **Settings** → **Y Axis (Vertical) Orientation** → **Inverted**



Default plot

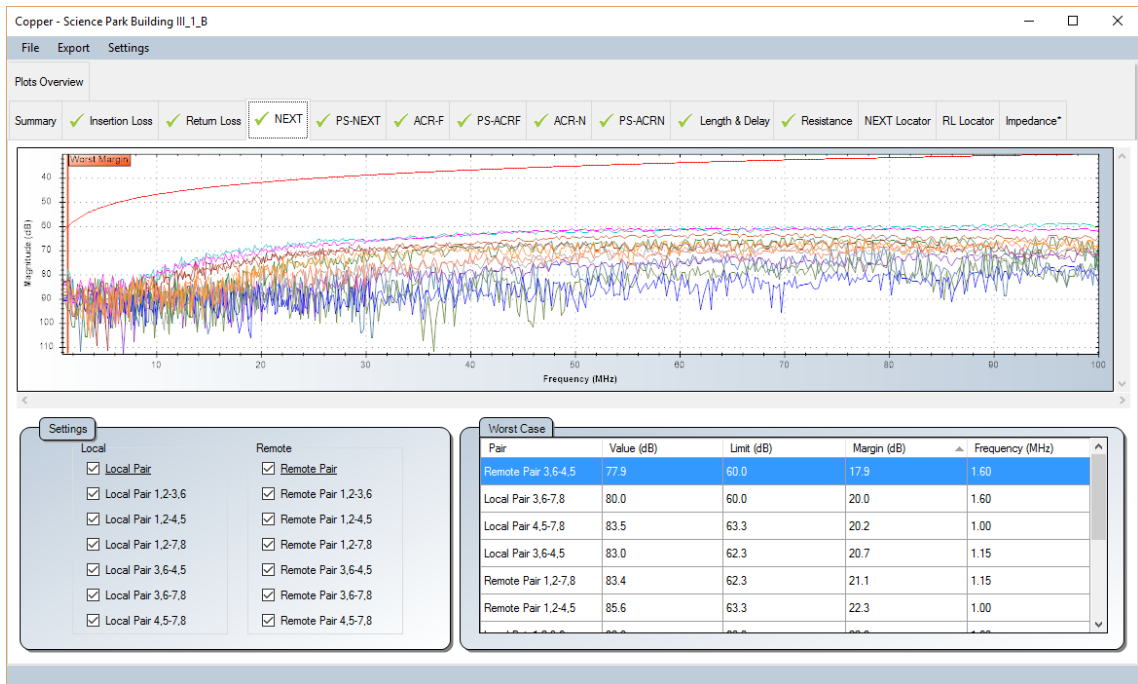


Inverted Plot

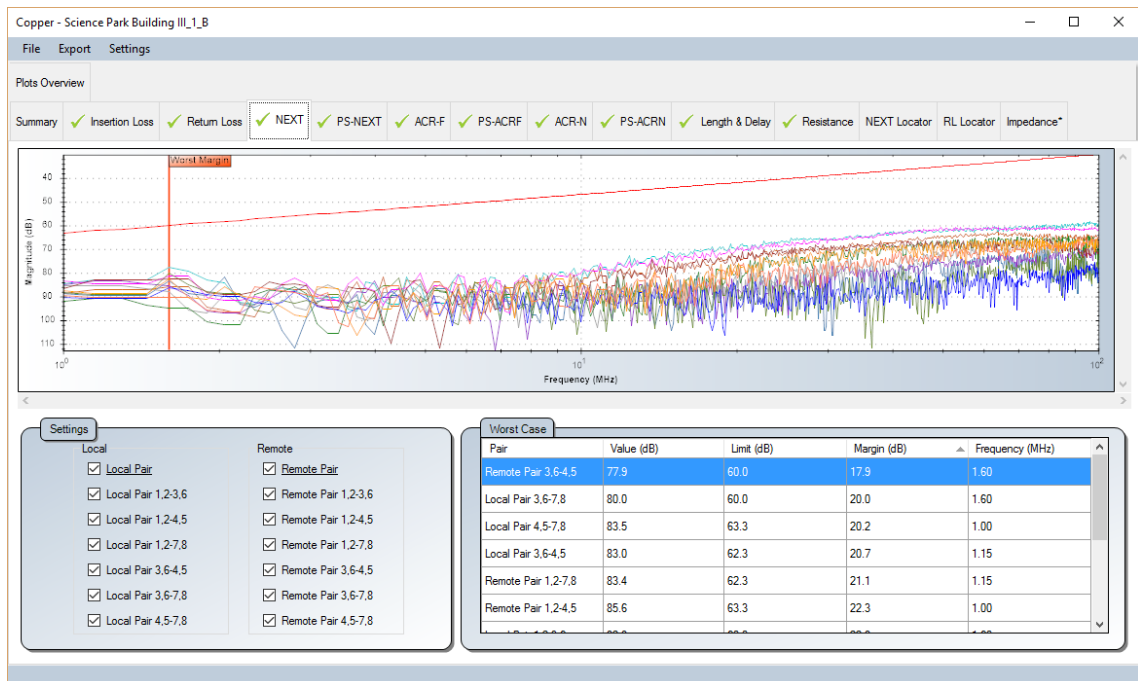
#### 4.1.2 Linear & Logarithmic

1. Go to **Settings** → **X Axis (Horizontal) Orientation** → **Linear (default)**

## Data Management



### ➔ Logarithmic

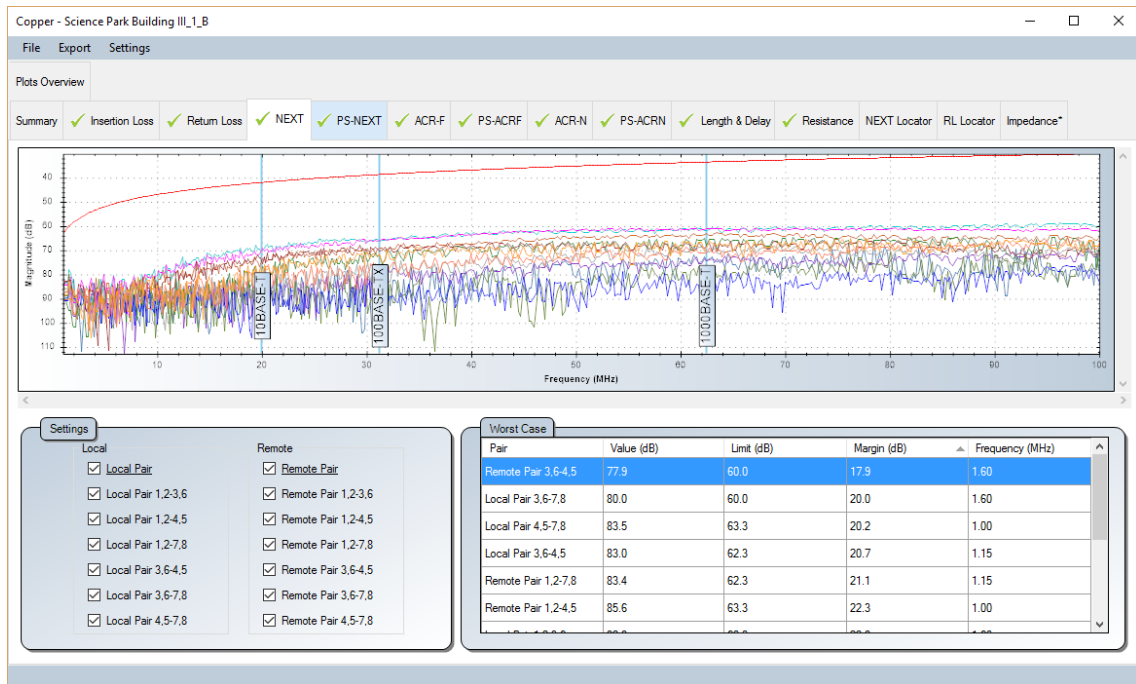


### 4.1.3 Markers

1. Go to **Settings** ➔ **Markers**

➔ **Ethernet Standards** – additional markers indicating frequencies of various Ethernet standards will be indicated for reference.





### ➔ Worst Margins (default)



## 4.1.4 Worst Case

1. Go to **Settings** ➔ **Worst Case**  
➔ **Worst Margins (default)**

## Data Management



### ➔ Worst Value



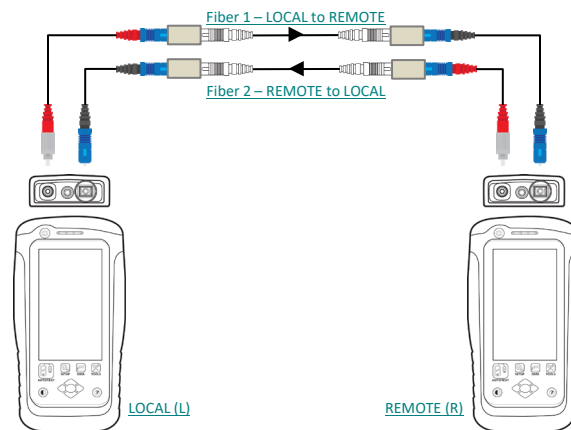
## 4.1.5 Viewing Fiber Test Results

The following diagrams will explain the results based on the different configuration selected.

### Single Direction, Dual-Ended

Summary				
$\lambda$ 1310nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	L->R	0.58	2.45	1.87
Fiber 2	L->R	-	-	-
Fiber 1	R->L	-	-	-
Fiber 2	R->L	0.93	2.45	1.52
$\lambda$ 1550nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	L->R	0.46	2.45	1.99
Fiber 2	L->R	-	-	-
Fiber 1	R->L	-	-	-
Fiber 2	R->L	0.81	2.45	1.64

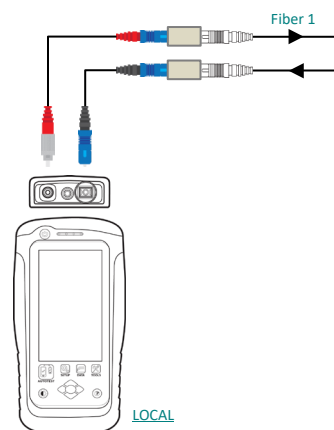
022-SM-T...ualEnded



### Single Direction, Loopback

Summary				
$\lambda$ 1310nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	-	0.18	2.35	2.17
Fiber 2	-	-	-	-
Fiber 1	-	-	-	-
Fiber 2	-	-	-	-
$\lambda$ 1550nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	-	0.11	2.35	2.24
Fiber 2	-	-	-	-
Fiber 1	-	-	-	-
Fiber 2	-	-	-	-

023-SM-T...-Loopback

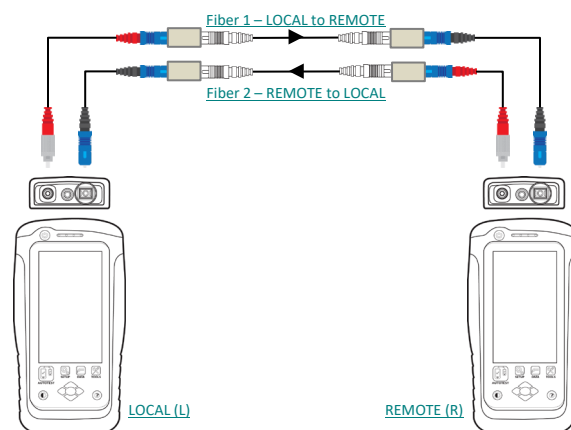


### Bi-Direction, Dual-Ended

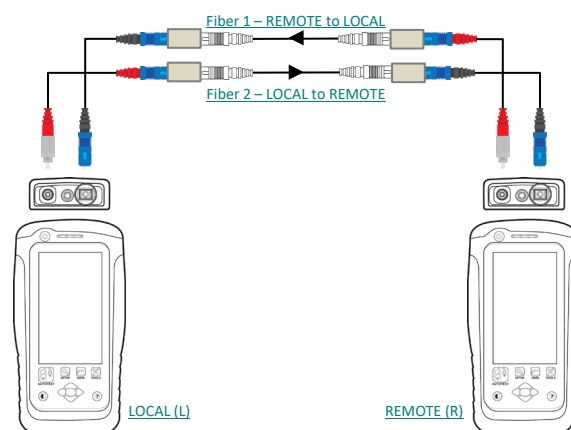
Summary				
$\lambda$ 1310nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	L->R	0.00	2.45	2.45
Fiber 2	L->R	0.00	2.45	2.45
Fiber 1	R->L	0.77	2.45	1.68
Fiber 2	R->L	0.79	2.45	1.66
$\lambda$ 1550nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	L->R	0.00	2.45	2.45
Fiber 2	L->R	0.00	2.45	2.45
Fiber 1	R->L	0.72	2.45	1.73
Fiber 2	R->L	0.65	2.45	1.80

024-SM-T...ualEnded

#### Step 1



#### Step 2

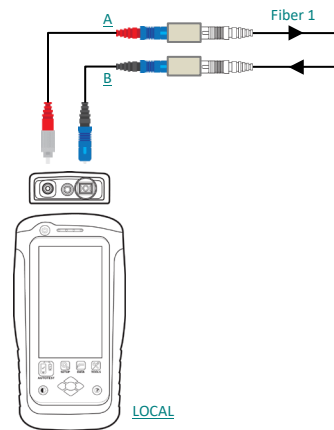


Bi-Direction, Loopback

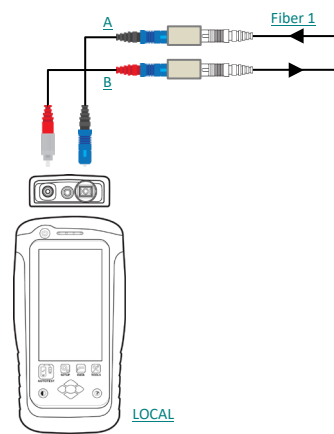
Summary				
λ 1310nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	A->B	0.17	2.35	2.18
Fiber 2	-	-	-	-
Fiber 1	B->A	0.27	2.35	2.08
Fiber 2	-	-	-	-
λ 1550nm				
		Loss (dB)	Limit (dB)	Margin (dB)
Fiber 1	A->B	0.12	2.35	2.23
Fiber 2	-	0.00	-	-
Fiber 1	B->A	0.21	2.35	2.14
Fiber 2	-	-	-	-

025-SM-T...-Loopback

Step 1



Step 2



## 4.2 Editing information

1. Right click at the results selection screen (right panel).

Test No.	Device Type	Cable Label	Overall Result	Limit Type	Overall Length (m)	NEXT Margin (dB)	RL Margin (dB)	Time Stamp
1	Copper	WX4500 A-3	✓	ISO - Class D Channel	34	11.20	9.20	17-10-2018 05:11...
2	Copper	WX4500 A-3	✓	ISO - Class D Channel	34.1	11.20	8.80	17-10-2018 02:27...
3	Copper	WX4500 A-1	✓	TIA - Cat 5e Channel	34.1	10.50	8.50	17-10-2018 01:53...
4	Copper	WX4500 A-1	✓	ISO - Class D Channel	34.1	11.20	9.17	17-10-2018 03:47...
5	Copper	WX4500 A-2	X	ISO - Class D Channel	33	0.00	0.00	17-10-2018 05:09...
6	MPO	WX4500 A-16	✓	40GBASE-SR4				17-10-2018 04:46...
7	MPO	WX4500 A-17	✓					17-10-2018 04:47...
8	MPO	WX4500 A-18	✓					17-10-2018 04:59...
9	MPO	WX4500 A-15	✓					17-10-2018 04:20...
10	Fiber	WX4500 A-7	✓					17-10-2018 12:59...
11	Fiber	WX4500 A-8	✓					17-10-2018 04:28...
12	Fiber	WX4500 A-9	✓					17-10-2018 04:45...
13	MPO	WX4500 A-19	✓					17-10-2018 05:05...
14	Fiber	WX4500 A-5	✓					17-10-2018 05:55...
15	Fiber	WX4500 A-6	X					17-10-2018 12:37...
16	Fiber	WX4500 A-10	X					17-10-2018 05:23...
17	Fiber	WX4500 A-11	X					17-10-2018 06:07...
18	Fiber	WX4500 A-12	✓					17-10-2018 05:39...
19	Fiber	WX4500 A-13	✓					17-10-2018 12:24...

Summary

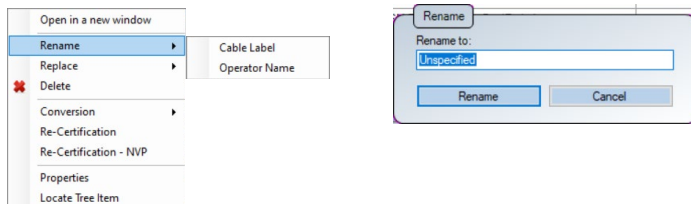
Local Ser. No. pw20201257  
 Remote Ser. No. pw20100090  
 Cable Manufacturer Generic UTP  
 Cable Name CAT 5e UTP  
 Cable Type Unshielded  
 Connector Manufacturer Generic Shielded  
 Connector Name STP Mod Jack SE  
 Connector Type Shielded  
 Limit ISO - Class D Channel

Properties

- Delay (ns) 171.0
- Cable NVP (%) 68.0
- Resistance (Ohms) 7.7
- Insertion Loss (dB) 7.1
- Return Loss (dB) 8.1
- NEXT (dB) 11.3
- PS-NEXT (dB) 12.8
- ACR-F (dB) 10.4
- PS-ACRF (dB) 12.4
- ACR-N (dB) 23.7
- PS-ACRN (dB) 25.3

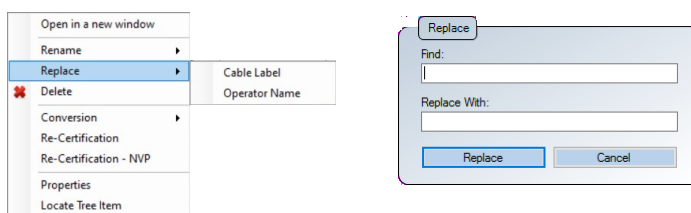
- Go to **Rename** → **Cable Label** to rename the selected cable.

Go to **Rename** → **Operator Name** to rename the selected operator.

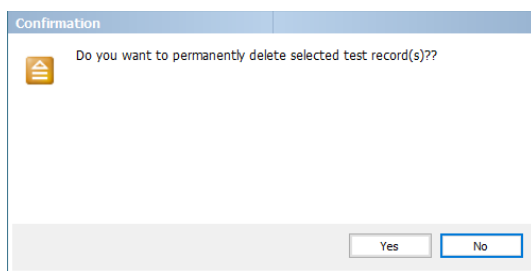


Go to **Replace** → **Cable Label** to find the label to be replaced on the selected result(s).

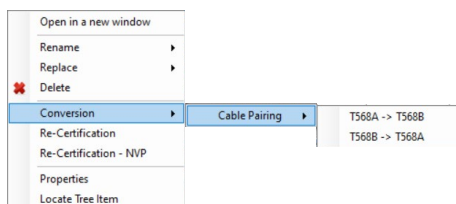
Go to **Replace** → **Operator Name** to find the name to be replaced on the selected result(s).



- Go to **Delete** to permanently delete a test result. Click **[Yes]** to proceed.

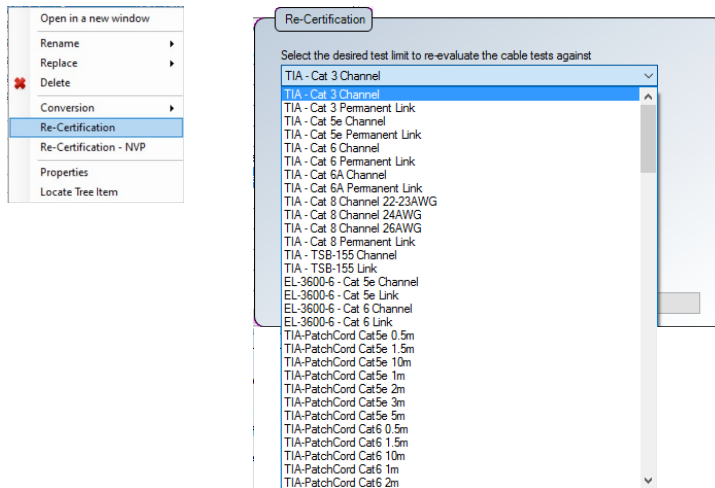


- Go to **Conversion** → **Cable Pairing** to change between T568A to T568B cable pairing and T568B to T568A pairing. Default setting uses T568B cable pairing.

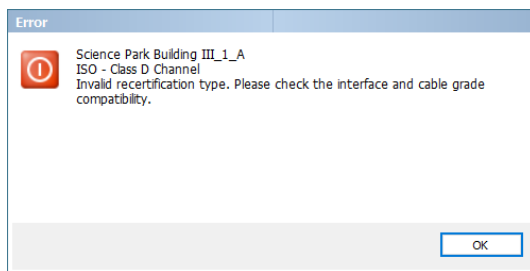


- Go to **Re-Certification** to recertify the selected test result using another test limit.

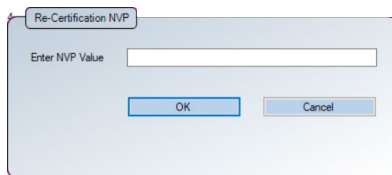
## Data Management



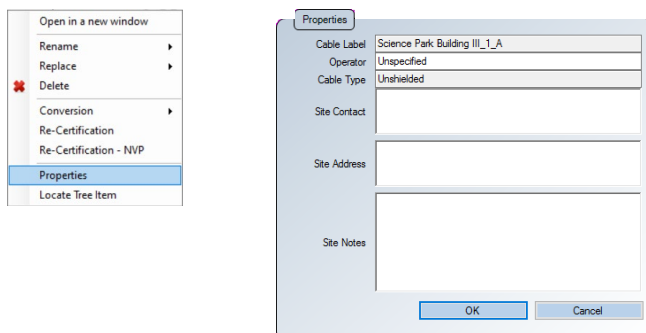
Re-certification will fail if test condition is not met.



6. Go to **Re-Certification – NVP** to recertify the selected test result using another NVP value.



7. Go to Properties to view user editable information on the selected result



8. Go to Locate Tree Item to find where the selected cable label is located within the project hierarchy tree.

Test Type	Device Type	Cable Label	Overall Result	Limit Type	Overall Length (m)	NEXT Margin (dB)	RL Margin (dB)	Time Stamp
1	Copper	WX4500	D 20m	✓	ISO - Class D Link PL1 PL2 CP1	19.7	15.40	11.10
2	Copper	WX4500	5e 20m	✓	TIA - Cat 5e Permanent Link	19.7	15.80	11.00
3	Copper	WX4500	6 20m	✓	TIA - Cat 6 Permanent Link	19.7	6.30	6.60
4	Copper	WX4500	E 20m	✓	ISO - Class E Link PL1 PL2 CP1	19.7	7.20	6.60
5	Copper	WX4500	6a 20m	✓	TIA - Cat 6A Permanent Link	19.7	1.30	4.90
6	Copper	WX4500	EA 20m	✗	ISO - Class EA Link PL1 PL2 CP1	19.7	-0.50	4.90
7	Copper	WX4500	5e 30m	✓	TIA - Cat 5e Permanent Link	29.2	14.80	4.80
8	Copper	WX4500	D 30m	✓	ISO - Class D Link PL1 PL2 CP1	29.2	14.80	4.80
9	Copper	WX4500	6 30m	✓	TIA - Cat 6 Permanent Link	29.2	5.00	3.00
10	Copper	WX4500	6A 30m	✓	TIA - Cat 6A Permanent Link	29.2	5.00	3.00
11	Copper	WX4500	E 30m	✓	TIA - Cat 6 Permanent Link	29.2	5.00	3.00
12	Copper	WX4500	EA 30m	✓	TIA - Cat 6 Permanent Link	29.2	3.30	3.00




### Note

Backup \*.PRX file before performing Re-certification as this process will overwrite existing test results.

Re-certifications are only applicable to Copper test types.

## 4.3 Searching for information

- Select type of search from the drop-down menu and input search value in the search field or select from the additional search options.
  - Cable label – searches for matches in the “Cable Label” column.
  - Limit – searches for matches in the “Limit Type” column.
  - Test type – searches for matches in the “Test Type” column.
  - Length longer/shorter than – searches for matches in the “Overall length” column.
  - Time later/earlier than – searches for matches in the “Time Stamp” column.
  - Duplicate data – searches for duplicated data in the “Duplicate Order” column. Column will only be present when the same data is imported into the project.
- Press **[Enter]** or click the ‘Search’  icon on the left to begin search.

## 5 Setting Preference

### 5.1 Personalizing the test reports

1. Go to **Settings** → **Company Details** to personalize test results with your corporate logo and company name.
2. Enter Company name and click on the empty area to browse for image of the logo. Click [OK] to save.

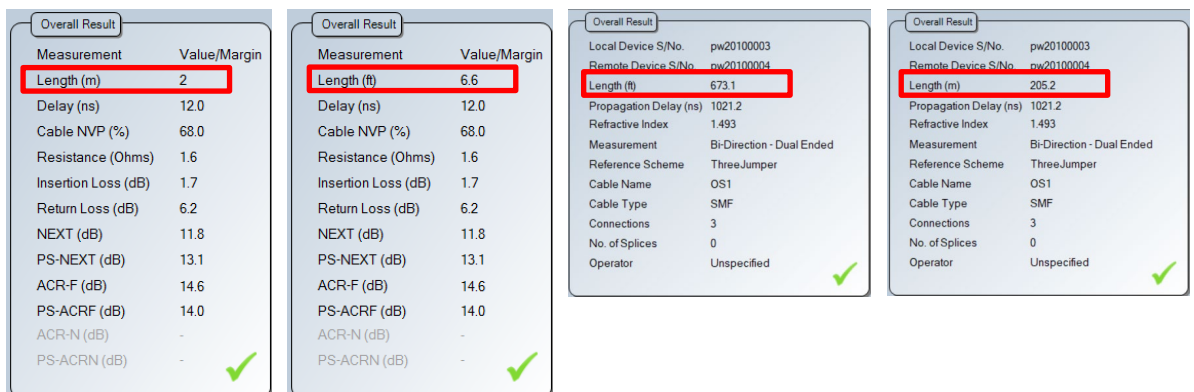


3. Your Company name and corporate logo will be displayed on the top left-hand corner of the next result exported.



### 5.2 Choosing the length units

1. Go to **Settings** → **Length Unit** to choose length units to be displayed in Meters or Feet on the test results.

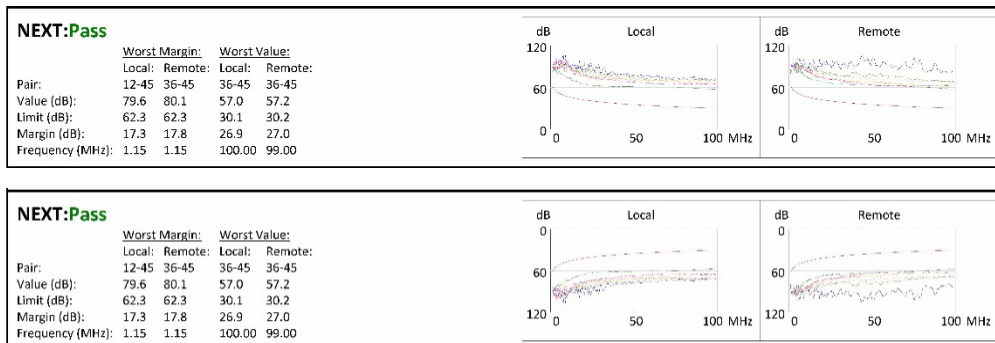




### 5.3 Choosing the report format

1. Go to **Settings** → **PDF Report Format** to choose the format of the report.

→ **Y-axis Inverted** – all test results will generate charts with inverted Y-axis

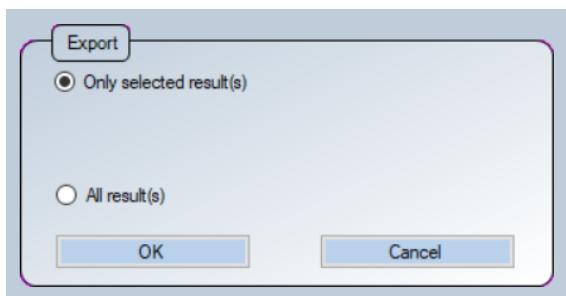


Same test report with “Y-axis Inverted” option enabled.

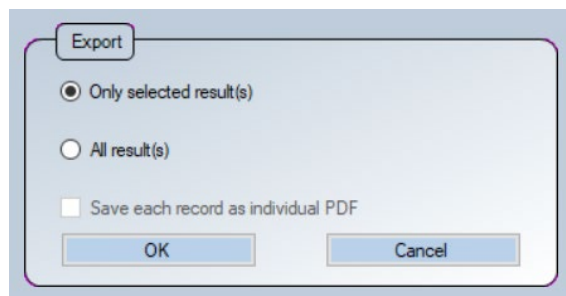
→ **Plots** – selecting **[High Resolution]** will generate PDF report in the highest printable quality or **[Low Resolution]** for PDF reports in compressed file size.

2. Go to **Settings** → **CSV Report Format** → **Layout** to choose the format of the report.

→ **Layout A** (default) – selected result(s) will be exported in CSV format

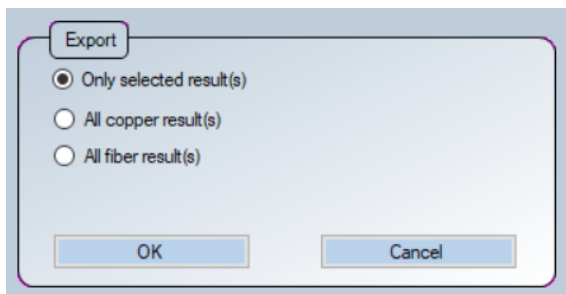


Export > CSV > Summary

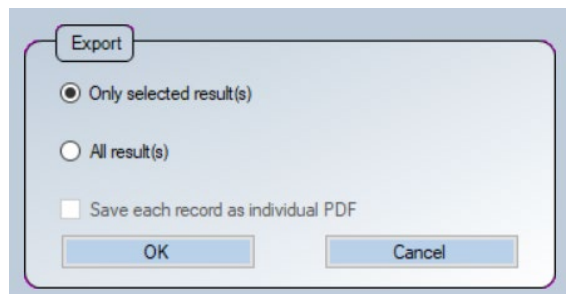


Export > CSV > Detail

→ **Layout B** – selected result(s) will be exported in CSV format, with additional values such as Insertion Loss, Return Loss, NEXT, ACR-N, ACR-F, PS-NEXT and PS-ACRF in MHz for copper, and loss difference between the set reference value and the actual measured value.



Export > CSV > Summary



Export > CSV > Detail

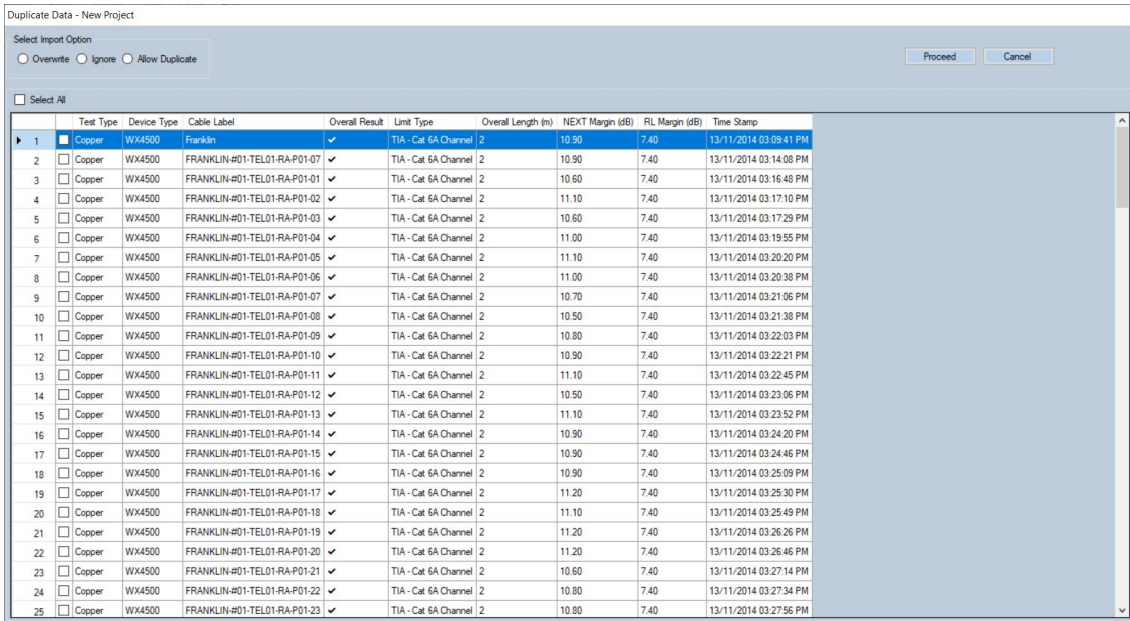


Starting from v8.3, the “Factory Calibration Status” of the WireXpert will be indicated on all PDF reports to remind end-users of timely calibration of their devices.

## Setting Preference

It is recommended to calibrate your WireXpert annually to ensure accurate measurements.

## 5.4 Filtering duplicate test results



Go to **Settings** → **Import** → **Check Duplicate** to allow eXport to check for duplicate cable labels on test results import. Select result(s) or select all and choose import option to proceed. Option is enabled by default.

**Overwrite** – select result(s) to replace with the existing data in the project.

**Ignore** – select result(s) to be excluded from being overwritten when importing duplicated data.

**Duplicate** – select result(s) to create copy/copies to the project. If the same result is imported multiple times, eXport will list the duplicated data in grey and indicate the order of when the duplicated data is imported in the Duplicate Order column. The duplicated will remain in the list until only one instance of the same result remains in the list. Renaming the cable label will not create another instance of the result.

	Test Type	Device Type	Cable Label	Overall Result	Limit Type	Overall Length (m)	NEXT Margin (dB)	RL Margin (dB)	Time Stamp	Duplicate Order
1	Copper	WX4500	Franklin	✓	TIA - Cat 6A Channel 2	10.90	7.40		13/11/2014 03:09:41 PM	
2	Copper	WX4500	Franklin	✓	TIA - Cat 6A Channel 2	10.90	7.40		13/11/2014 03:09:41 PM	1
3	Copper	WX4500	Franklin	✓	TIA - Cat 6A Channel 2	10.90	7.40		13/11/2014 03:09:41 PM	2
4	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-01	✓	TIA - Cat 6A Channel 2	10.60	7.40		13/11/2014 03:16:48 PM	
5	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-01	✓	TIA - Cat 6A Channel 2	10.60	7.40		13/11/2014 03:16:48 PM	1
6	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-01	✓	TIA - Cat 6A Channel 2	10.60	7.40		13/11/2014 03:16:48 PM	2
7	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-02	✓	TIA - Cat 6A Channel 2	11.10	7.40		13/11/2014 03:17:10 PM	
8	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-02	✓	TIA - Cat 6A Channel 2	11.10	7.40		13/11/2014 03:17:10 PM	1
9	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-03	✓	TIA - Cat 6A Channel 2	10.60	7.40		13/11/2014 03:17:29 PM	
10	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-03	✓	TIA - Cat 6A Channel 2	10.60	7.40		13/11/2014 03:17:29 PM	1
11	Copper	WX4500	FRANKLIN-#01-TEL01-RA-P01-04	✓	TIA - Cat 6A Channel 2	11.00	7.40		13/11/2014 03:19:55 PM	

## 5.5 Quick View

Go to **Settings** → **Quick View** to optimize data loading time by limiting only up to 2000 results to be displayed. If enabled, the status bar will prompt to click on individual site in the project to view test results. Option is enabled by default.



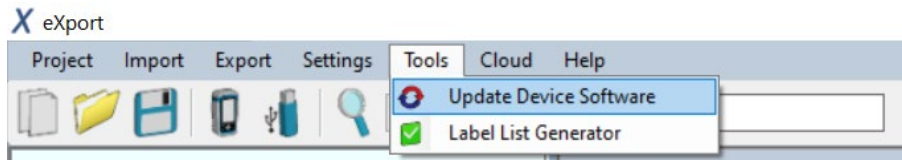
## 5.6 Last Project on Startup

Starting from v8.2, eXport lets you have the option to start eXport with the last or a new project. Go to **Settings** → **Open Last Project on Startup** to enable or disable option. Option is enabled by default.

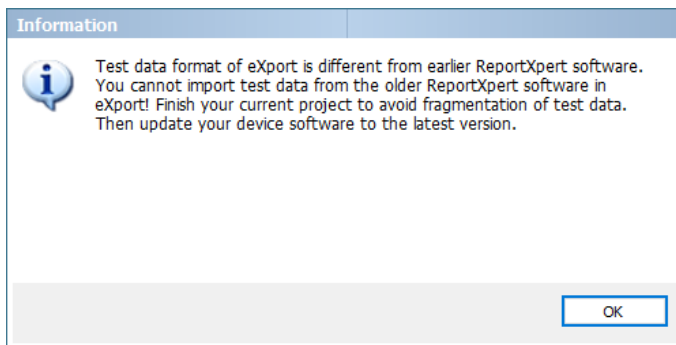
## 6 Special Operations

### 6.1 Updating the Device Software

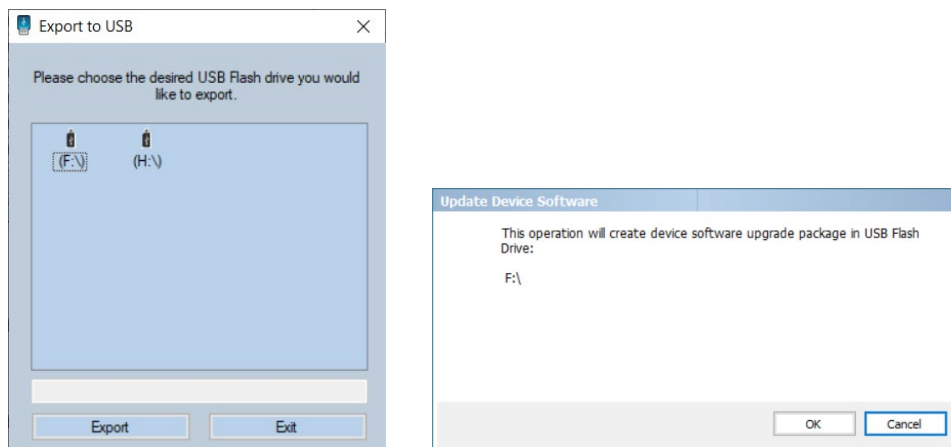
- 1 Go to **Tools** → **Update Device Software**



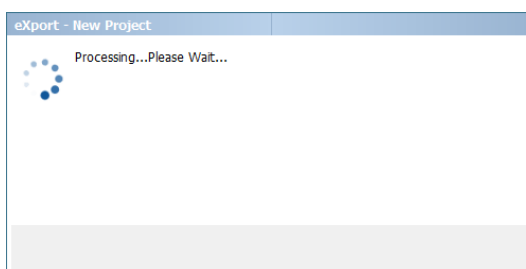
- 2 Please ensure an USB flash drive has been connected to your workstation before proceeding with update.
- 3 Click **[OK]** after reading the warning message to proceed.



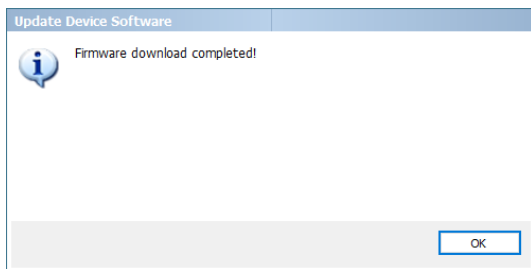
- 4 Select USB flash drive for firmware to be exported to and click 'Export' to proceed.



- 5 Please wait while the data download is in process.



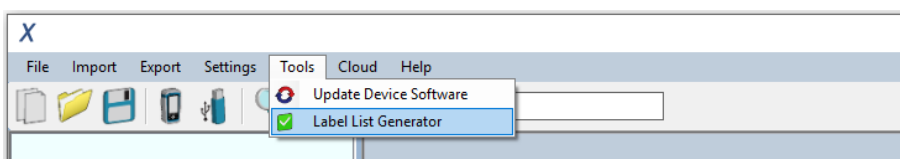
- 6 Click **[OK]** proceed after the download process is complete.



## 6.2 List Based Testing

### 6.2.1 Hierarchy

Go to **Tools** → **Label List Generator**



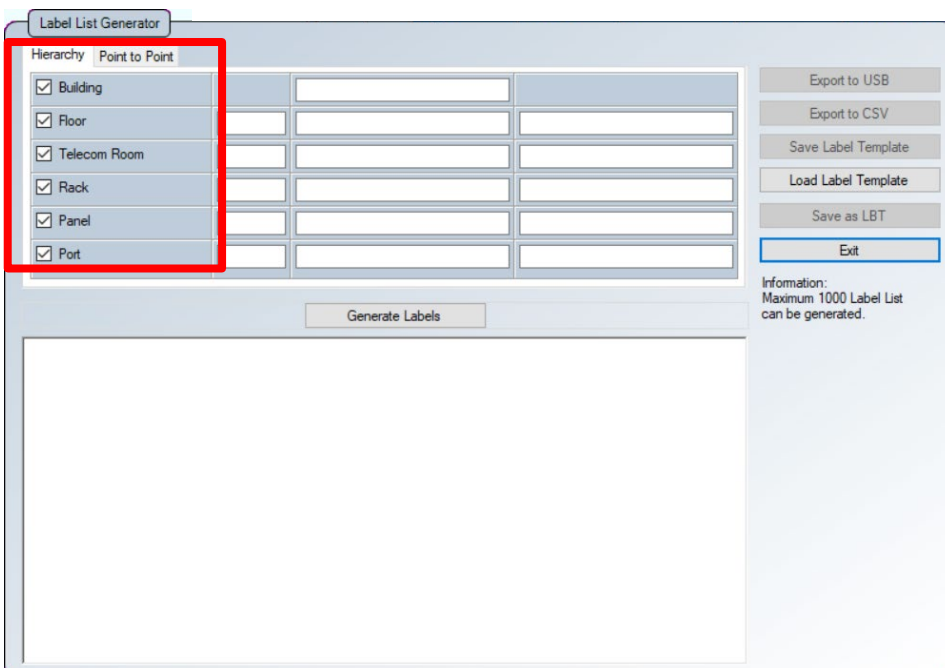
The Label List Generator generates cable labels in customizable hierarchical (building name-> floor-> telecom room-> rack-> panel-> port) order before conducting cable certifications, reducing effort from keying labels after every test. The pre-defined labels imported into the device will prevent duplicate testing when conducting in non-sequential orders.

Label Tiers provides hierarchical tiers of the labels. Uncheck tier if not applicable.

**[Delimited with]** refers to the text separator between each tier of labeling. Leave blank if not applicable. Alpha-numeric and ASCII characters can be used.

**[Start with]** refers to the first label of the tier. Only alpha-numeric characters can be used.

**[End with]** refers to the last label of the tier. eXport will increase the number of labels depending on the input. Only alpha-numeric characters can be used.

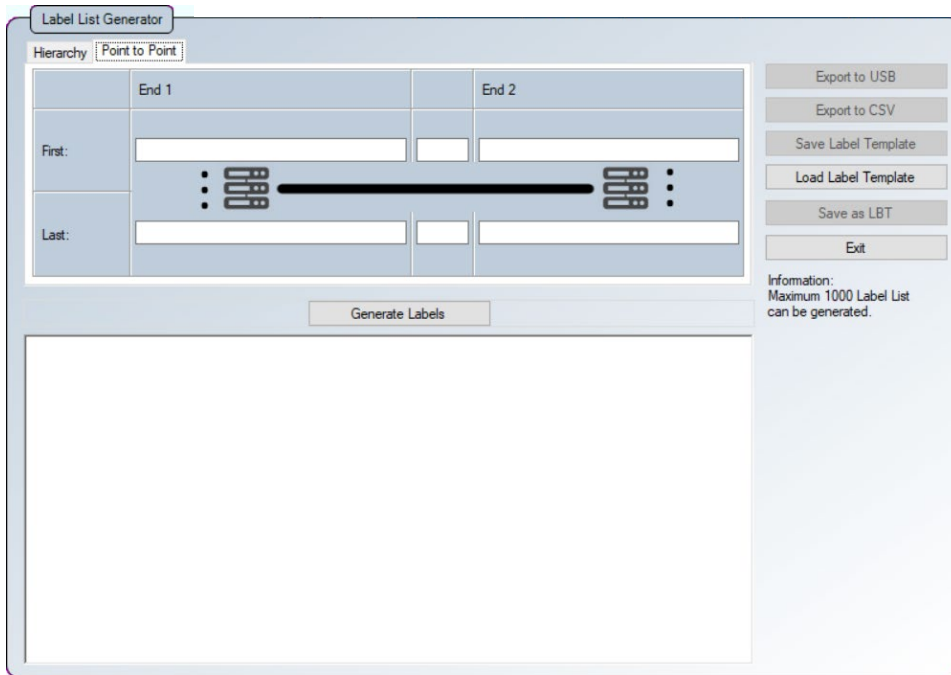


Example

Start With	End With	Labels Generated
BuildingName-Floor_01	BuildingName-Floor_10	10
BldName-L01-RoomA	BldName-L01-RoomF	6 <i>Labels ending with alphabets will also be increased.</i>
BldName-#01-RoomA-A1	BldName-#02-Room-B5	20 <i>Labels generated:</i> <i>BldName-#01-Room-A1~A5</i> <i>BldName-#01-Room-B1~B5</i> <i>BldName-#02-Room-A1~A5</i> <i>BldName-#02-Room-B1~B5</i>

### 6.2.2 Point-to-Point

The Point-to-Point label generator creates labels for straight forward connections from Point A to Point B such as Backbone or connections terminations between two panels.



#### User Manuals

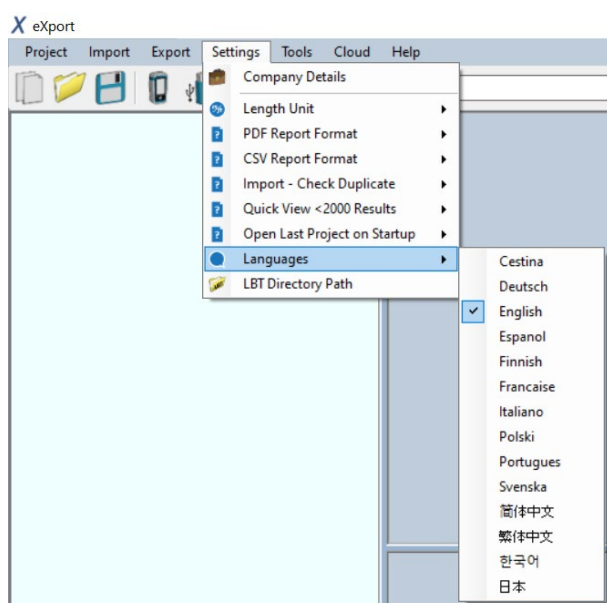
For more information on how to use List Base Testing, please refer to “User Guide for List Based Testing”.

## 7 Localization



### 7.1 Selecting the Language

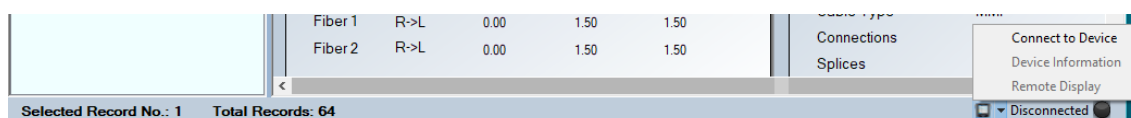
eXport allows users to select from the more than 10 available languages. English is the default language.

Go to **Settings** → **Languages** to select preferred language.



### 7.2 View the device on your Workstation

1. Connect WireXpert to your workstation using a mini-USB cable.
2. Click the device icon  and select **[Connect to Device]**. **Connected**  will be indicated once a connection with WireXpert is established.



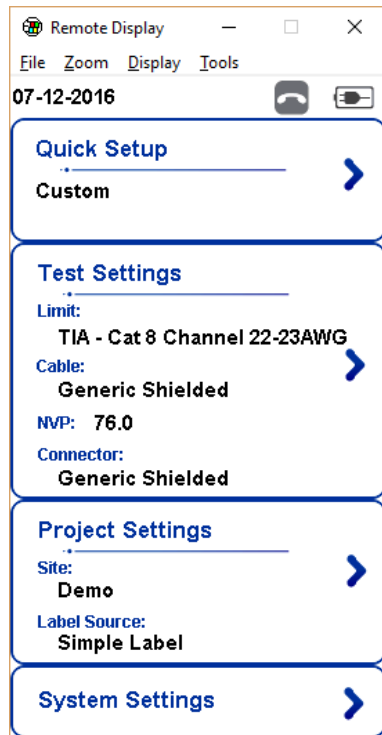
3. Select **[Device Information]** to view the device's serial number, software version and calibration date.



## Localization

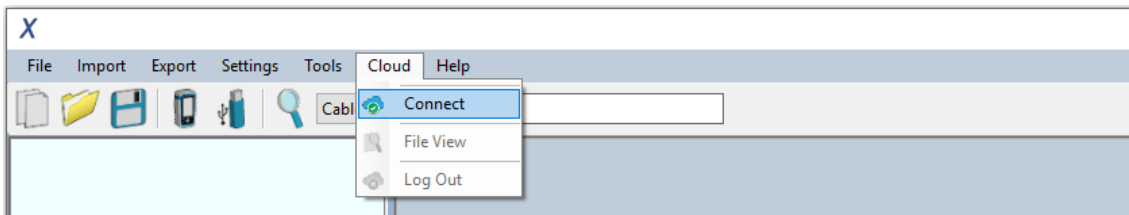
Select **[Remote Display]** to access the Local unit remotely via your workstation.

Accessing this option will allow advanced functions such as screen capturing (image), action recording (video), screen magnifying (zoom), etc.





## 8 Cloud



eXport Cloud is a new cloud-based feature available from v8.0 and above. It is a solution designed for companies who own several sets of WireXpert units and centralized project management. In a typical Software-as-a-Service (SaaS) model, your provider stores your data and potentially charging you by the bytes or through a recurring subscription. Only by hosting on your own server and network with eXport Cloud, not only will your data privacy be protected, project management cost will also be more efficient.



### User Manuals

For more information on eXport Cloud, please refer to “User Manual for eXport Cloud”.

## 9 Declarations

### EU Declaration of Conformity



We

**Softing Singapore Pte. Ltd.**  
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#03-09, The Franklin  
Singapore Science Park 1  
Singapore  
118223

declare under our sole responsibility that the products

Model / Description

WX4500-FA	/	WireXpert cable certifier 2500 MHz
WX500-CU	/	WireXpert cable certifier 500 MHz
WX_AD_VCL_MM1/MM2	/	Multi mode fibre adapter
WX_AD_EF_MM1/MM2	/	Multi mode fibre adapter (encircled flux compliant)
WX_AD_SM1/SM2	/	Single mode fibre adapter
WX_AD_MM_MPO_KIT/ SOURCE/PWRMETER	/	Multi mode MPO adapters

comply with the requirements of the following directives:

**EMC directive 2004/108/EC (valid until April 19, 2016)**  
**EMC directive 2014/30/EU (valid from April 20, 2016)**

**RoHS directive 2011/65/EU**

**Low Voltage Directive 2006/95/EC (valid until April 19, 2016)**  
**Low Voltage Directive 2014/35/EU (valid from April 20, 2016)**

Applied harmonised standards:

**EN 55024 (2003-10) : Information technology equipment – Immunity characteristics – Limits and methods of measurement**

**EN 55022 (2008-05) : Information technology equipment – Radio disturbance characteristics – Limits and methods of measurement**

**IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013 : Information technology equipment – Safety – Part 1 : General requirements**

Simon Harrison  
General Manager

Date

Template version 2.1

Document No: 3000-0006

This device complies with the requirements of the EC directive 2004/108/EG "Electromagnetic Compatibility" (EMC directive). It meets the following requirements:



#### Note

A Declaration of Conformity in compliance with the above standards has been made and can be requested from Softing Singapore Pte Ltd.



#### China ROHS

The WireXpert device and its test components are China ROHS compliant.



#### WEEE

Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime.



Please dispose of this product according to the respective national regulations or contractual agreements. If there are any further questions concerning the disposal of this product, contact Softing IT Networks.



#### CAUTION

This is a Class A product. In a domestic environment this product may cause radio interference. In that case the user may be required to take adequate measures!



#### ROHS

The WireXpert device and its test components are ROHS compliant.



Intertek

#### ETL Intertek Verified

WireXpert device is ETL verified to ANSI/TIA IIIe, IEC 61935-1 levels IIIe & IV and currently proposed Level V draft, with the applicable measurement accuracy.



#### Class 1 Laser Product

The light source transmitted from the following fiber test modules – Single Mode (SM), Multi-Mode (MM) and Encircled Flux compliant Multi-Mode (MMEF) are classified as Class 1 lasers and are very low risk and "safe under reasonably foreseeable use", including the use of optical instruments for intrabeam viewing.



### **Class 1m Laser Product**

The light source transmitted from the following fiber test modules – MPO Remote are classified as Class 1m lasers and have wavelengths between 302.5 nm and 4000 nm, and are safe except when used with optical aids.

## 10 Technical Support

Softing's global presence ensures our customers receives sales and technical support anywhere around the world. For more information: <https://itnetworks.softing.com>

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