



KI6106 / T6I06 10G PONPower Meter Data Management Software Operating Manual

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1. Overview

The 10G/XG PON Power Meter is ideal for measuring power in a typical live BPON/EPON/GPON FTTX communication link. The measured data can be saved with a time stamp in the internal memory of the meter for record and analysis at later stages.

The Data Management Software provides users a mean to download data saved in meter onto PC with Window operating system via USB connection. The software can also be used to download pass/fail threshold values of a connected meter onto PC, edit them and then uploaded them back onto the meter. The software also includes a feature for users to calibrate the connected meter for better measurement accuracy if necessary.

2. Software Installation

Computer requirement:

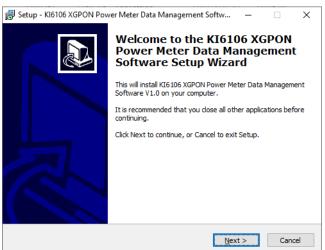
- WIN7 or WIN 10.
- Microsoft Office 2003 or more advanced version
- PC with USB port; COM 16 or lower Virtual Com Port configuration

Installation steps:

Note: It is recommended to reboot the PC upon completing the software installation process.

1. Double click to execute the file, *KI6106 XGPON Power Meter Data Management Software.exe* (downloadable from Kingfisher's website or from the supplied CD.

2. Click "Next" to continue.



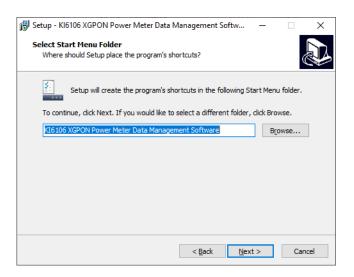
3. Select a directory in your PC to save the software file and click "Next" to continue.



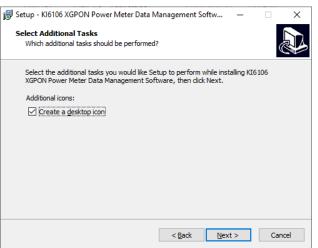


🛃 Set	tup - Klé	6106 XGPON Power Meter Data Management Soft	w ·	_		×
		stination Location should KI6106 XGPON Power Meter Data Management ?	Software	be		
		Setup will install KI6106 XGPON Power Meter Data Ma the following folder.	anagemer	nt Soft	ware into	
	To conti	inue, click Next. If you would like to select a different f	folder, cli	ck Brov	/se.	
	Files (x8	86)\KI6106 XGPON Power Meter Data Management So	ftware	Bro	wse	
	At least	4.6 MB of free disk space is required.				
		< <u>B</u> ack	<u>N</u> ext >		Cano	el

4. Click "Next" to continue.



5. If you wish, check "Creat a desktop icon" and click "Next" to continue.







6. Click "Install" to continue.

🛃 Setup - Kl6106 XGPON Power Meter Data Management Softw 🗕 🗌	×
Ready to Install Setup is now ready to begin installing KI6106 XGPON Power Meter Data Management Software on your computer.	
Click Install to continue with the installation, or click Back if you want to review or change any settings.	
Destination location: C:\Program Files (x86)\KI6106 XGPON Power Meter Data Management Softw:	^
Start Menu folder: KI6106 XGPON Power Meter Data Management Software	
Additional tasks: Additional icons: Create a desktop icon	
	~
· /	
< Back Instal Ca	ncel

7. Upon completion of the installation, click "Next" to continue.



8. If the Virtual Com port driver has been installed in the PC prior to this, select "Modify" and click "Next" to continue.







9. Click "Next" to continue.

🖟 Virtual Com port driver V1.4.0 - Instal	IShield Wizard		×
Custom Setup Select the program features you want in:	stalled.		E
Click on an icon in the list below to change h	now a feature is in	istalled. Feature Descript	ion
InstallShield	< <u>B</u> ack	Next >	Cancel

10. Click "Install" to continue.

Virtual Com port driver V1.4.0 - Insta	IIShield Wizard
Ready to Modify the Program	
The wizard is ready to begin installation	
If you want to review or change any or exit the wizard.	f your installation settings, click Back. Click Cancel to
Current Settings:	
Setup Type:	
Typical	
Destination Folder:	
C:\Program Files (x86)\STMicroeled	:tronics\Software\
User Information:	
Name: User	
Company:	

11. Click "Finish" to complete the installation processes.



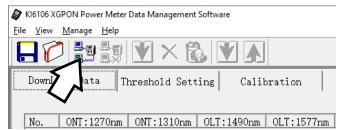




3. Connecting Meter to the Software

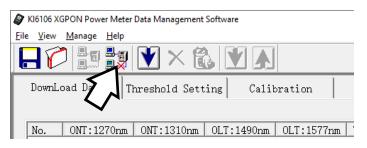
To connect:

- 1. Start the software by double-click on its Icon.
- 2. Connect the meter to the computer using the supplied USB cable.
- 3. Turn the meter on.
- 4. Click button as shown below to initiate the connection. A dialog box should pop up to confirm a successful connection otherwise, refer to section 9 at the end of this manual for possible causes and solutions.



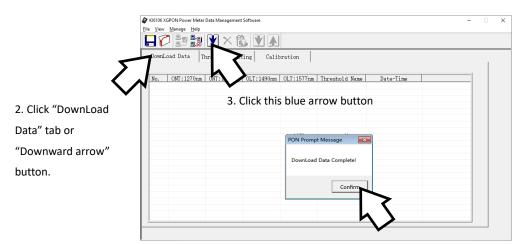
To disconnect:

Click on the button as shown below, a dialog box will pop up confirming that connection has been successfully terminated.



5. Download Data from Meter to the Software

1. Ensure that the meter is connected to the software.



5. All data records saved in the meter's memory will be downloaded ishter displayed on the software as shown Revision: 4 Date: 21 Dec 2023 Page 6 of 12





below.

oad Data Th	ureshold Sett	ing Cali	oration				
0NT:1270nm	ONT:1310nm	0LT:1490nm	0LT:1577nm	Threshold Name	Date-Time		_
LOW	LOW	-8.65	-6.54	0	2018-11-2 11:00		
LOW	LOW	-8.65	-6.54	0	2018-11-2 12:00		
LOW	LOW	-8.65	-6.54	0	2018-11-2 12:01		
	ONT:1270nm LOW LOW	ONT:1270nm ONT:1310nm LOW LOW LOW LOW	ONT:1270nm ONT:1310nm OLT:1490nm LOW LOW -8.65 LOW LOW -8.65	ONT:1270nm ONT:1310nm OLT:1490nm OLT:1577nm LOW LOW -8.65 -6.54 LOW LOW -8.65 -6.54	ONT:1270ram ONT:1310ram OLT:1490ram OLT:1577ram Threshold Name LOW LOW -8.65 -6.54 0 LOW LOW -8.65 -6.54 0	ONT:1270rm ONT:1310rm OLT:1490rm OLT:1577rm Threshold Name Date-Time LOW LOW -8.65 -6.54 0 2018-11-2 11:00 LOW LOW -8.65 -6.54 0 2018-11-2 12:00	ONT:1270rm ONT:1310rm OLT:1490rm OLT:1577rm Threshold Name Date-Time LOW LOW -8.65 -6.54 0 2018-11-2 21:00 LOW LOW -8.65 -6.54 0 2018-11-2 21:00

6. Managing Data Saved in Meter using the Software

Continue from step 5 of Section 6 above and follow the steps in the subsections below to delete data saved in meter, export data in meter onto PC or open data files saved in PC.

6.1 Deleting data

A. Deleting single data record:

Click button, 🔀 in the Tool Bar and the last data record saved in meter will be deleted.

B. Deleting all data records:

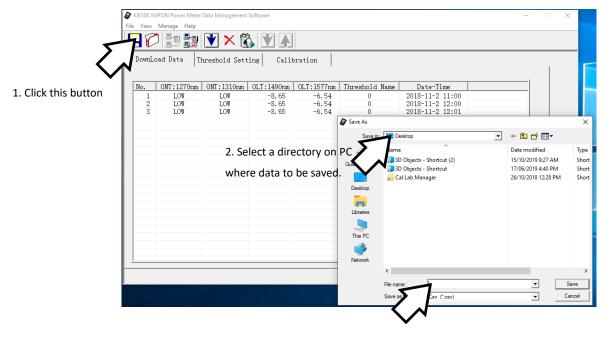
Click button, to delete all record (clear memory content) saved in meter.

0		record	j					J
	Ø KI6106 X	~ <	ata Management	Software	\geq			- 0
	<u>File</u> <u>V</u> iew		\rightarrow					
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	DownI	1	hreshold Sett	ing Cali	oration			
	Down		meshoru secu	ing carri	nation			1
		I				[]		
	No.	ONT:1270nm LOW	ONT:1310nm LOW		OLT:1577nm	Threshold Name 0	Date-Time 2018-11-2 11:00	
	1	LOW	LOW	-8.65 -8.65	-6.54 -6.54	0	2018-11-2 11:00 2018-11-2 12:00	
	2	LOW	LOW	-8,65	-6.54	Ő	2018-11-2 12:00	



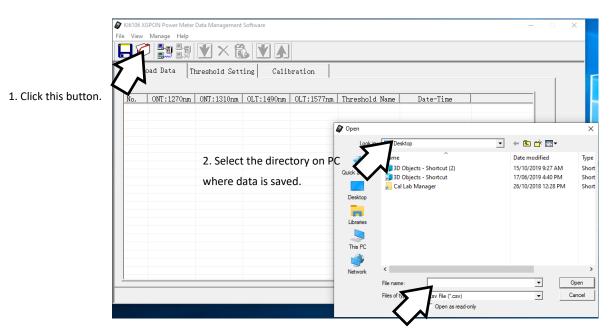
6.2 Saving Data downloaded from meter onto PC

With the software, data saved in meter can be transferred and saved in a PC, see figure below for



 Enter file name for data to be saved and click "Save".
 A popup message will be displayed confirming data has been exported successfully.

6.3 Open a data file saved in PC



3. Select the data file to open, then click "Open".





7. Setting meter's pass/fail thresholds using the software

The software can be used to remotely program Over/Pass/Fail threshold values of the meter, see instructions below.

1. Make sure that the meter is connected to software.

YKI6106 XGPON Power Mete	r Data Mana	gement Sof	tware									-		×
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	0	NT:1310r	ա	0	LT:1490r	m	0	LT:1577r	າກ		ONT:1270	nm		
Threshold	Over	Pass	Fai1	Over	Pass	Fai1	Over	Pass	Fail	Over	Pass	Fail		
1														
2														
3														
2. Click Thre	shold	Setti	ng tak).										

3. Click "downward arrow" and then "Confirm" to download thresholds from meter.

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File View Manage Help													
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DownLoad Data T	hreshold		Ca	librati	on								1
	0	NT	un	0	LT:1490r	າຫ	0	LT:1577r	m	0	DNT:1270	nm	
Threshold Name	Over	Pass	Fail	Over	Pass	Fail	Over	Pass	Fail	Over	Pass	Fail	
1	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	·
2	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	
3	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	
					rompt Me	eshold Cor	nplete!						

- 4. 3 groups (Threshold Name 1~3) of Alarm/Pass/Fail threshold values can be programmed in the meter. Select group and edit the values as necessary with mouse and keyboard.
- 5. Click "Upward arrow" button to upload the new threshold values onto the meter.





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8011	¥ >	< 🖍											
DownLoad Data T	hreshold	l Settin	4	brati	on								
	0	NT:1310r		0	LT:1490r	ա	0	LT:1577r	m	(ONT:1270	nm	
Threshold Name	Over	Pass	Fail	Over	Pass	Fail	Over	Pass	Fail	Over	Pass	Fail	
1	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	
2	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	
3	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	
					rompt Me	eshold Cor	nplete!						

8. Calibration Meter via the Software

The software can be used to calibrate the meter. Note that the instrument has already been calibrated in the factory. It usually does not require recalibration before the recommended 3-year calibration cycle. To calibrate the instrument, a stable light with narrow spectrum width (e.g. DFB lasers), a reference power meter with the relevant wavelength capabilities and a test grade SM optical patchlead are needed. Follow the steps below to do the calibration.

- 1. Make sure that software is connected to the instrument and click "Calibration" tab.
- 2. Connect the light source with the reference meter using the SM patchcord. Select the same wavelength (to be calibrated) on both equipment. Read and note down power value on reference meter.
- 3. Disconnect patchcord from reference meter and reconnect it to the appropriate port (ONT port for 1270 and 1310 nm; OLT port for 1490 and 1577 nm) on the instrument to be calibrated.
- 4. On the software, enter the power value read from reference meter in the box beside "Input The Standard Power" and, click the "Calibration" button of the wavelength being calibrated, see figure below.

PON Power Meter Management Software		- 8 8
File View Manage Help		
DownLoad Data Threshold Setting Calibration		
ONT:1270mm Input The Starts 1	dBm Calibration	
ONT:1310nm Input The Standard Power -10	dBm Calibration	
0LT:1490nm Input The Standard Power -10	dBm Calibrati	
OLT:1577nm Input The Stands 4	dBm Calibration 4	
	Factory Default	
	· V	

5. Repeat steps 2 through 4 for all the wavelengths that need recalibrations.





6. To restore the default factory calibration values, click the "Factory Default" button in the lower right corner.

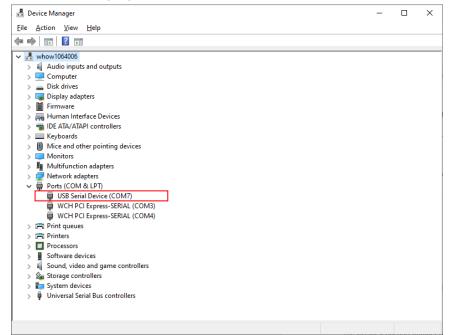
9. Common Problems and Solutions

The Data Management software and the instrument fail to connect.

Possible causes & solutions:

- 1. Operating system compatibility problem. Refer to Computer requirement in section 2 of this manual.
- 2. Improper USB cable connection between the computer and meter. Unplug and re-plug connectors at both devices to reconnect.
- 3. The meter is not turned on. Turn on the meter.
- 4. USB Virtual COM port driver has not been installed or updated. Make sure that the COM port driver has been properly installed on your PC.

Open **Device Manager** of your PC, if the COM port driver is installed, "USB Serial Device" should be seen under "Ports (COM & LPT)" as highlighted below when the meter is connected to PC.



Make sure that the serial port number COMx is not bigger than 17 i.e. COM17. If you see a serial port number bigger than that, change it by doing the following,

① Right-click on "USB Serial Device (COMx)" and select "Properties".





	USB Serial Device (COM7) Properties	×
	General Port Settings Driver Details Events	
	USB Serial Device (COM7)	
	Device type: Ports (COM & LPT)	
	Manufacturer: Microsoft	
	Location: Port_#0002.Hub_#0001	
	□ Device status	
	This device is working properly.	
	×	
	Change settings	
Click this	Change settings	

