

The Power of a PQube Network !

PSI QubeView



(주) 재신정보



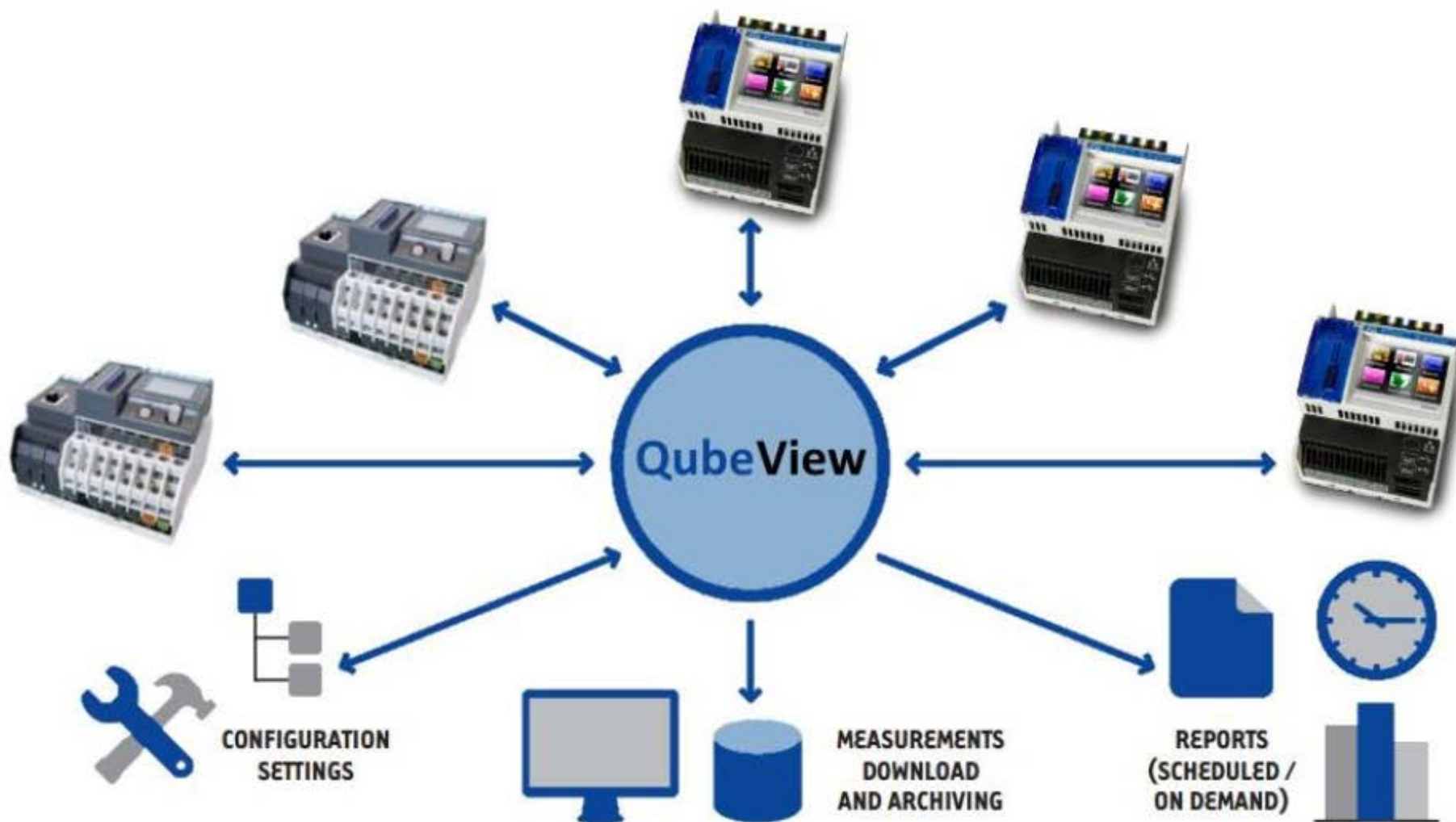
▪ QubeView 란 ?

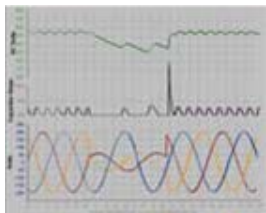
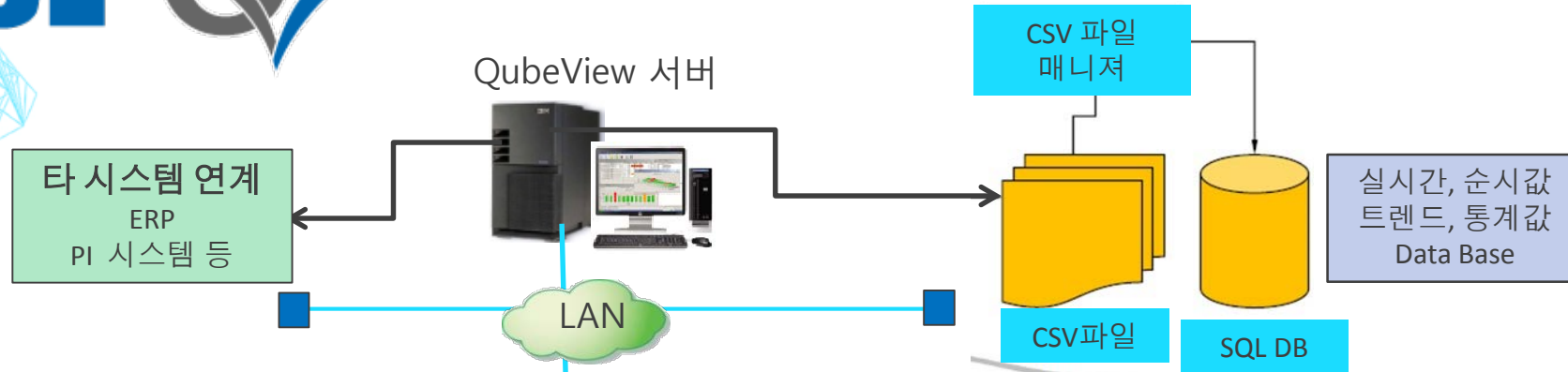
- 흩어져 있는 PQube, PQube3 를 SQL 서버가 5분 주기로 자동으로 이벤트를 가져와서 통합관리 하는 소프트웨어임.
- 개별 장치의 이벤트 저장 데이터를 개별적으로 접근하지 않고, 통합 QubeView 에 들어가서 검색, 관리하며, 버리는 이벤트를 하나도 없도록 함.
- CSV 파일을 이용하여 정밀 계측 파형 조사 기능 제공과 장기간 트렌드 제공, EN50160 보고서 작성 기능 제공
- PC 서버급 운영 가능하고, 유료 옵션으로 저렴하게 판매함.



QubeView

Concept and Configuration



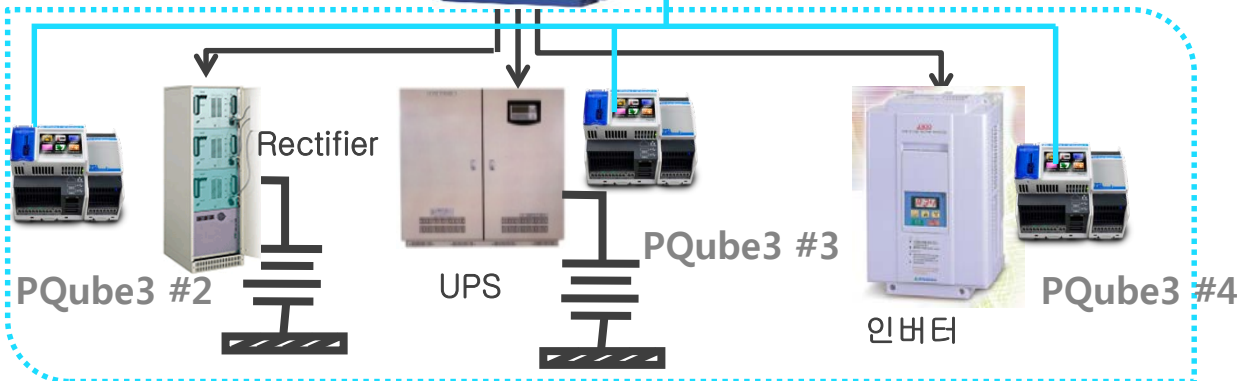


Power Quality Monitoring

SW Hub



PQube3 #1



기기명	실시간, 순시값, 트렌드 대상	비고
PQube #1	▪ 전원공급장치 전원공급용 배전반 감시	AC V, I, F
PQube #2	▪ Rectifier 입력 V, I, F와 배터리 DC V, I	AC, V, I, F and DC V
PQube #3	▪ UPS 출력 V, I, F 와 배터리 DC V, I	AC V, I, F and DC V
PQube #4	▪ 인버터 출력 AC V, I, F	



어디에 연결될 수 있는가 ?

- PQube (PQube3) 는 감동적인 센서임.
- PQube 센서들의 네트워크는 혁명적임.
- QubeView quick demo 을 경험해 보시기 바람.



QubeView

screens

Time period:
From ... to ...
From: 5/ 1/2016 To: 5/31/2016
HIERARCHY BY PROPERTIES

QubeView[admin] (demo)

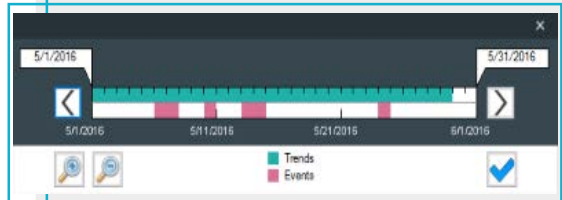
Time period:
From ... to ...
From: 1/ 1/2016 To: 5/ 1/2016

PSL QubeView Welcome admin

HIERARCHY BY PROPERTIES

Demo

Navigation icons: Home, Refresh, Checkmark



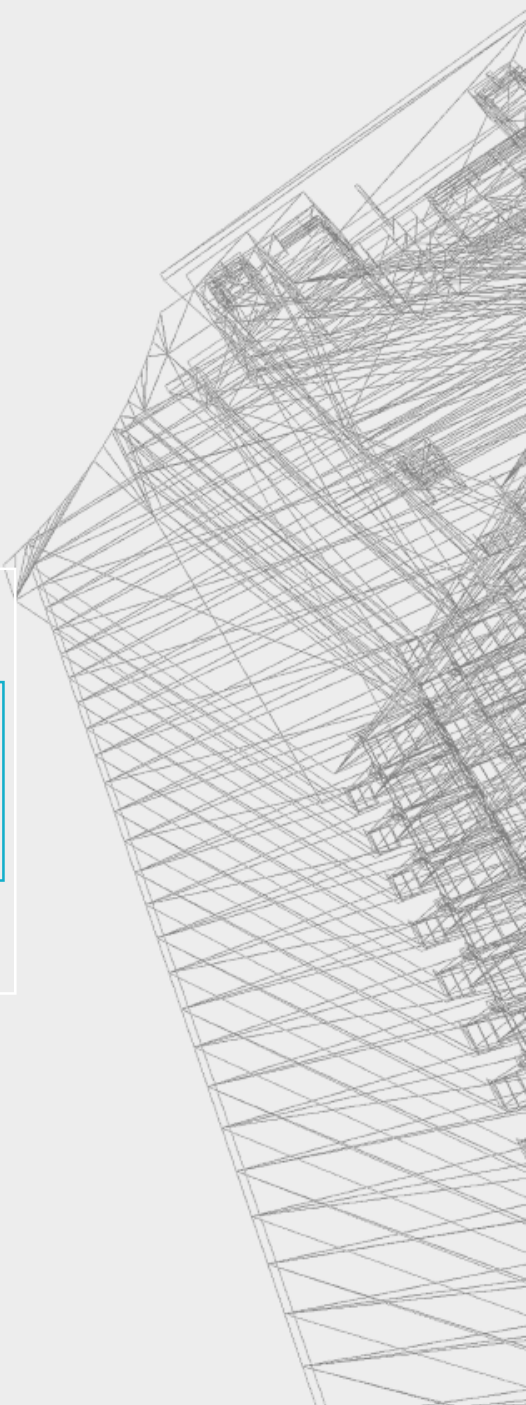
Lightbulb icon, Waveform chart, EN 50160 icon, Checkmark icon

From ... to ...
From: 5/ 1/2016 To: 5/31/2016

HIERARCHY BY PROPERTIES

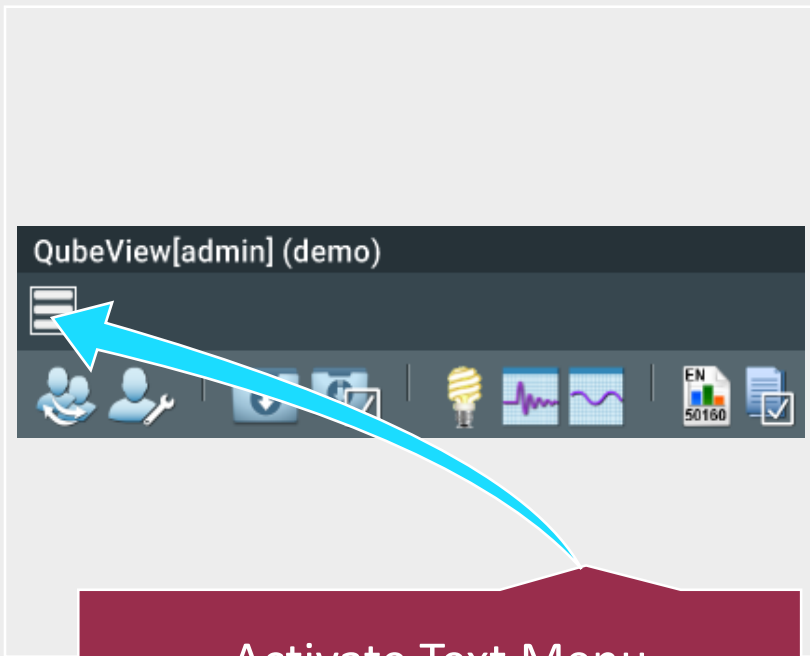
Demo

- Rooftop Solar
- Household Consumption

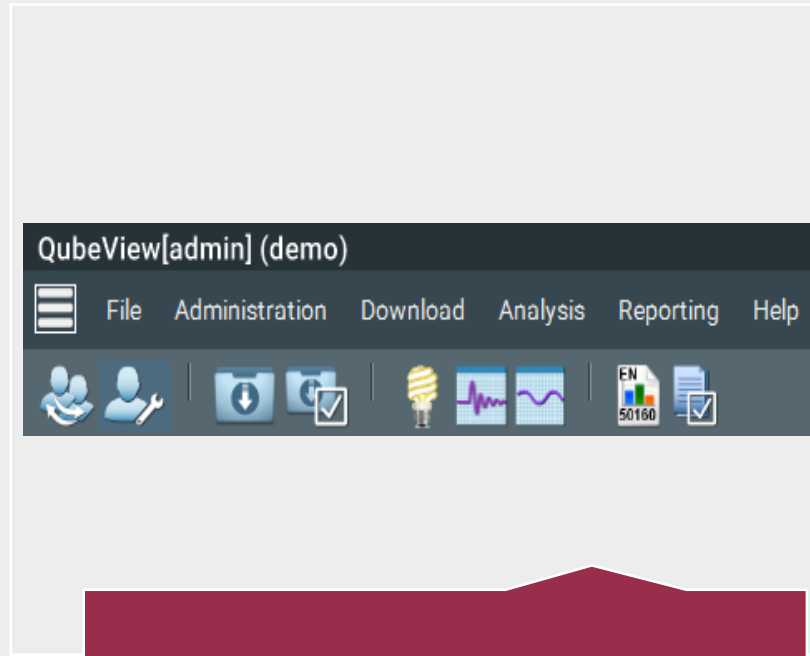


NAVIGATE

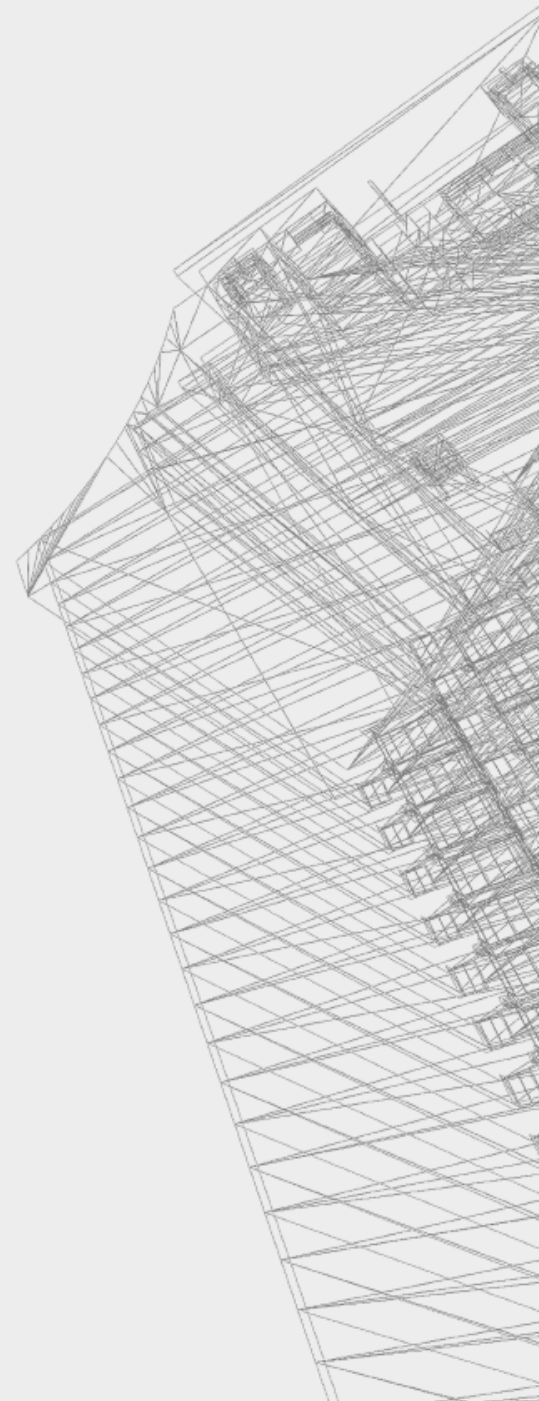
Device Tree / Time Selector



Activate Text Menu
By Pressing here

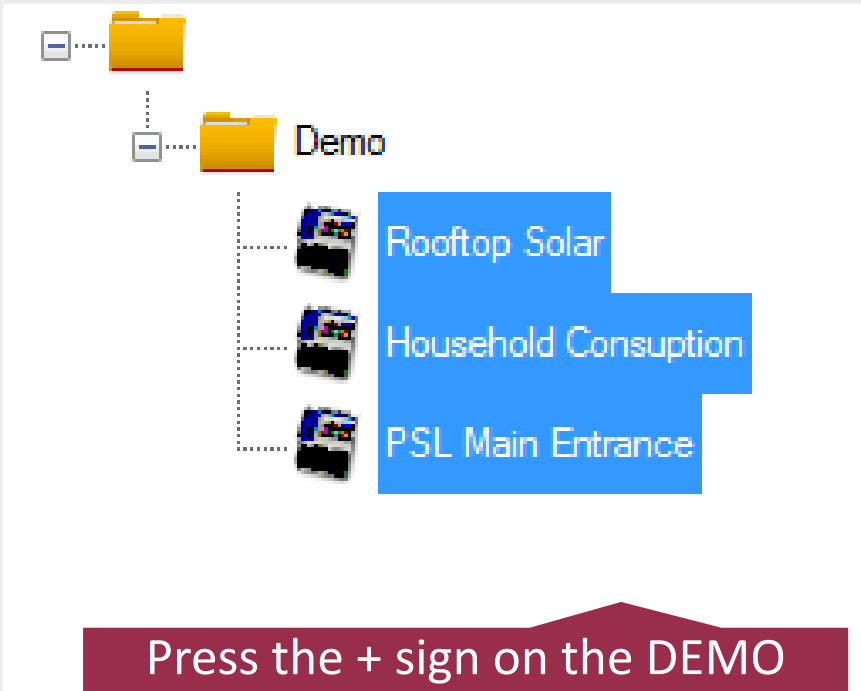


Text Menu Activated

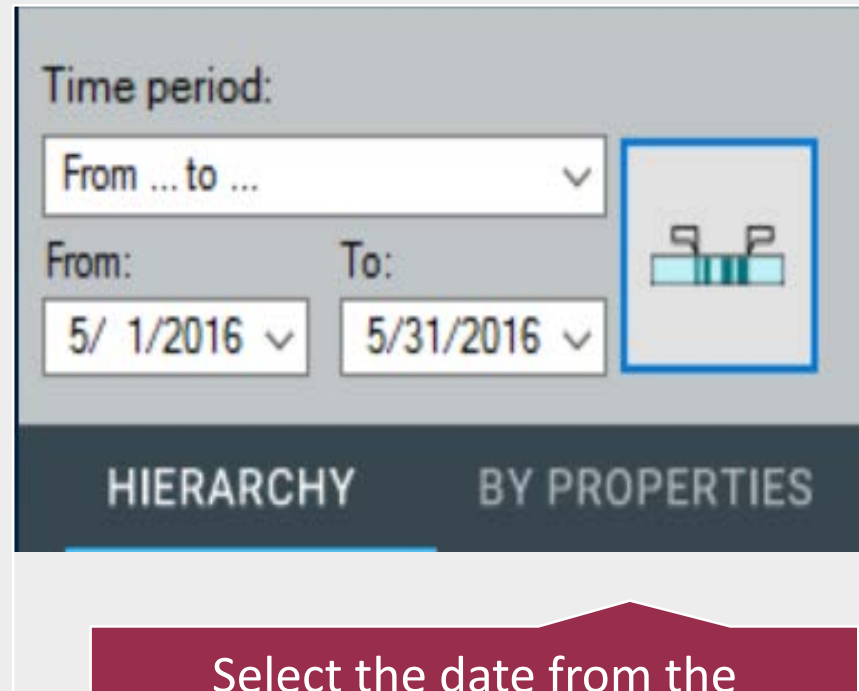


NAVIGATE

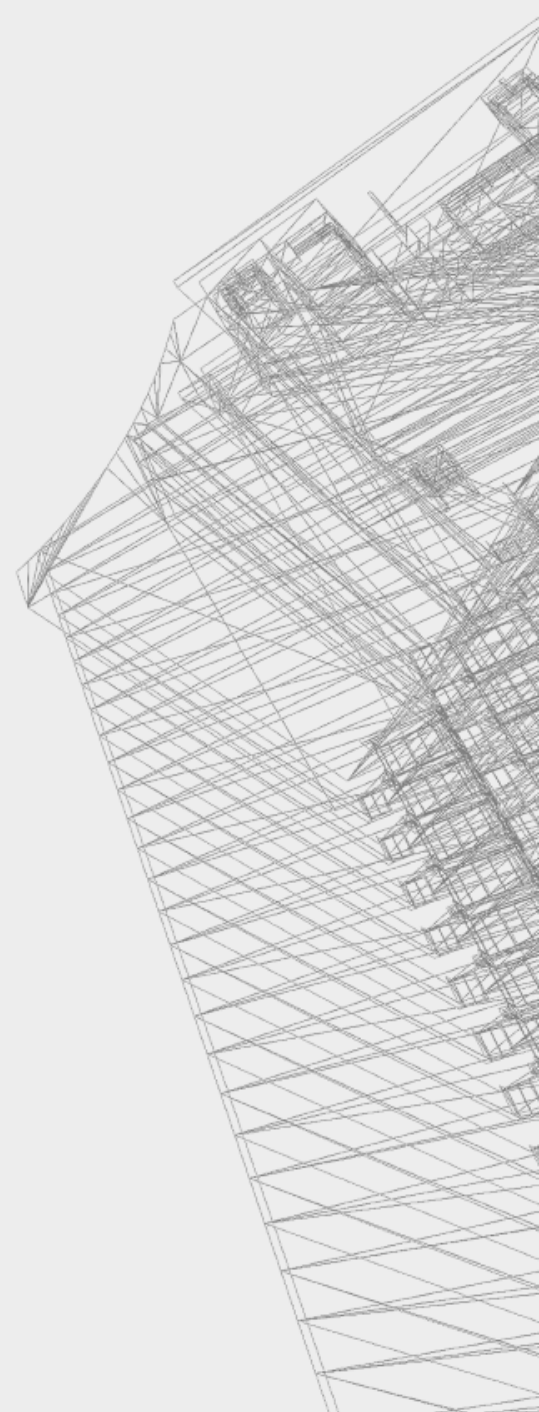
Device Tree / Time Selector



Press the + sign on the DEMO folder, press the shift Key and click on the PSL Main Entrance to Select all three sites



Select the date from the dropdown menu from May 1 to May 31 2016



NAVIGATE

Device Tree / Time Selector

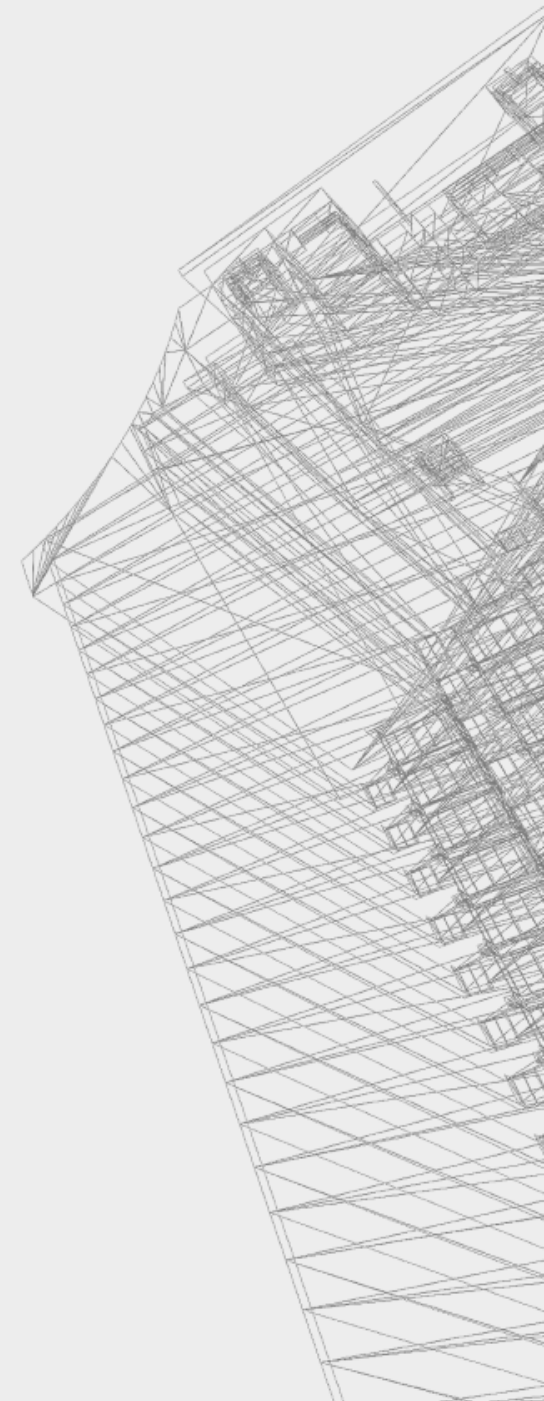
Time period:
From ... to ...
From: 5/ 1/2016 To: 5/31/2016
HIERARCHY BY PROPERTIES

Click Here

Activate the Time Bar

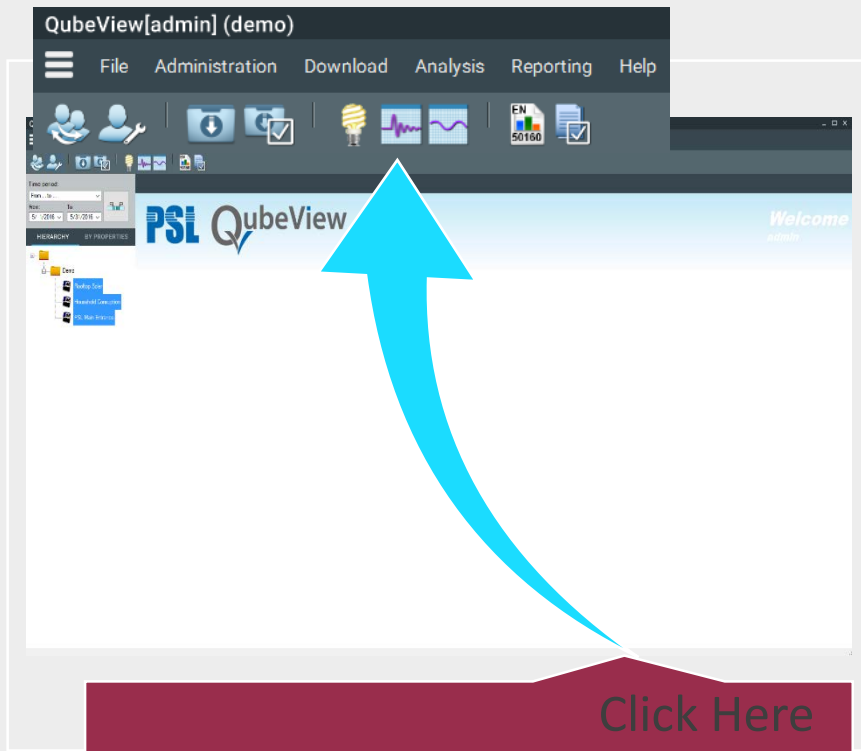
5/1/2016 5/31/2016
5/1/2016 5/11/2016 5/21/2016 6/1/2016
Trends Events
Click Here To accept

Time bar shows trends and events available in this time frame
May 1 to May 31 2016

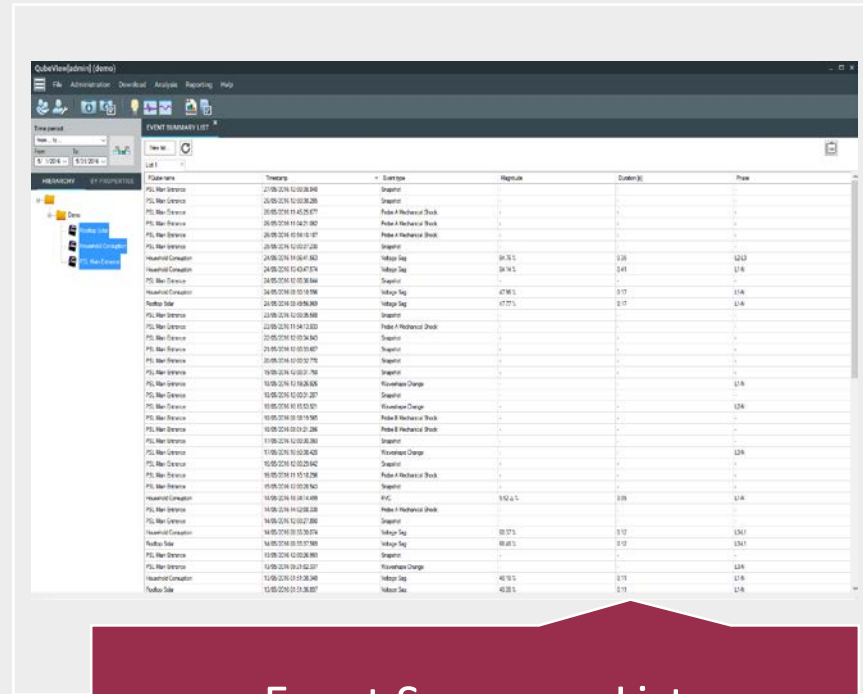


NAVIGATE

Event Summary List for the three sites



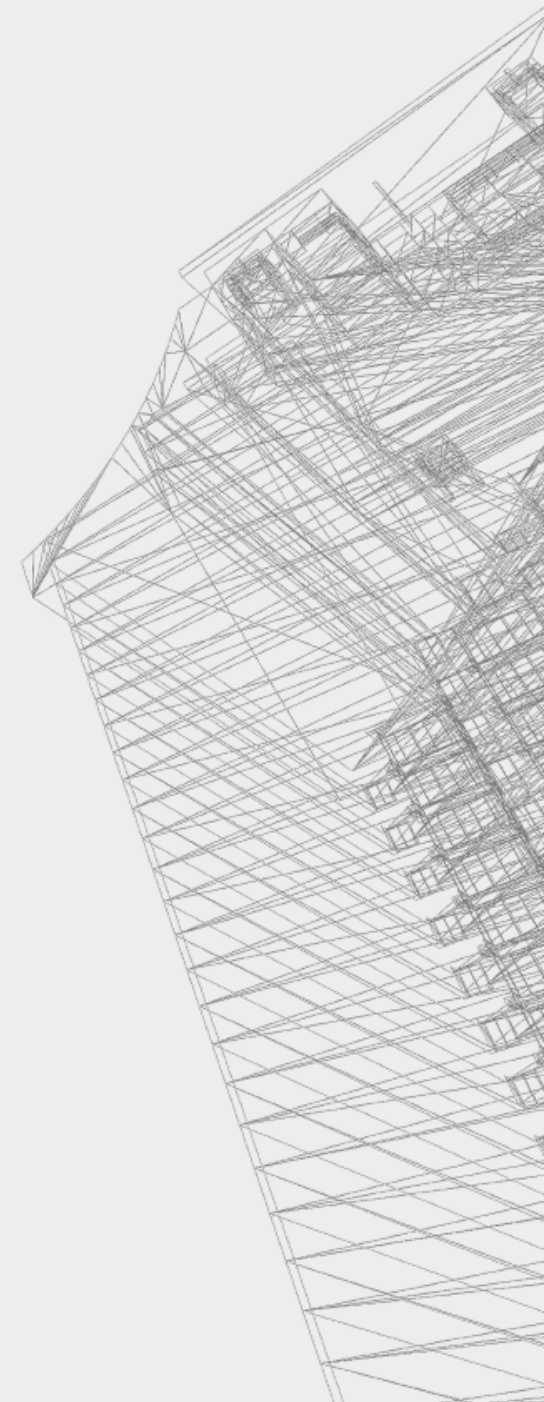
Click Here
Activate Event summary List



The screenshot shows the 'EVENT SUMMARY LIST' table in the QubeView[admin] (demo) application. The table has the following columns: Folder name, Timestamp, Event type, Magnitude, Duration(s), and Phase. The table contains 24 rows of data.

Folder name	Timestamp	Event type	Magnitude	Duration(s)	Phase
PSL_Mat_Telescope	21-09-2016 15:00:36.346	Signal	-	-	-
PSL_Mat_Telescope	21-09-2016 15:00:36.358	Signal	-	-	-
PSL_Mat_Telescope	20-05-2016 14:45:57.777	Probe A Mechanical Shock	-	-	-
PSL_Mat_Telescope	20-05-2016 14:45:57.802	Probe A Mechanical Shock	-	-	-
PSL_Mat_Telescope	20-05-2016 15:00:16.917	Probe A Mechanical Shock	-	-	-
PSL_Mat_Telescope	20-05-2016 15:00:27.235	Signal	-	-	-
Heavertel Convolution	24-09-2016 10:56:47.882	Voltage Sag	94.3% L	0.28	1212
Heavertel Convolution	24-09-2016 10:57:07.974	Voltage Sag	94.1% L	0.41	1218
PSL_Mat_Telescope	20-05-2016 15:00:36.864	Signal	-	-	-
Heavertel Convolution	24-09-2016 10:58:59.666	Voltage Sag	47.9% L	0.17	1214
Radlux Site	20-09-2016 10:05:56.803	Voltage Sag	47.7% L	0.17	1214
PSL_Mat_Telescope	21-09-2016 15:00:36.888	Signal	-	-	-
PSL_Mat_Telescope	21-09-2016 15:04:13.022	Probe A Mechanical Shock	-	-	-
PSL_Mat_Telescope	21-09-2016 15:04:34.340	Signal	-	-	-
PSL_Mat_Telescope	21-09-2016 15:05:01.467	Signal	-	-	-
PSL_Mat_Telescope	20-05-2016 15:00:19.718	Signal	-	-	-
PSL_Mat_Telescope	19-09-2016 15:00:17.768	Signal	-	-	-
PSL_Mat_Telescope	10-09-2016 15:16:28.825	Resonance Change	-	-	1218
PSL_Mat_Telescope	10-09-2016 15:00:27.237	Signal	-	-	-
PSL_Mat_Telescope	10-09-2016 15:05:50.7	Resonance Change	-	-	1224
PSL_Mat_Telescope	10-09-2016 15:18:59.585	Probe B Mechanical Shock	-	-	-
PSL_Mat_Telescope	10-09-2016 15:19:27.286	Probe B Mechanical Shock	-	-	-
PSL_Mat_Telescope	11-09-2016 15:00:28.888	Signal	-	-	-
PSL_Mat_Telescope	11-09-2016 15:00:28.425	Resonance Change	-	-	1224
PSL_Mat_Telescope	10-09-2016 15:00:29.842	Signal	-	-	-
PSL_Mat_Telescope	10-09-2016 15:01:15.258	Probe A Mechanical Shock	-	-	-
PSL_Mat_Telescope	10-09-2016 15:00:28.942	Signal	-	-	-
Heavertel Convolution	10-09-2016 10:48:48.888	AVC	9.12 ± 1	0.38	1214
PSL_Mat_Telescope	19-09-2016 14:02:28.228	Signal	-	-	-
PSL_Mat_Telescope	19-09-2016 15:00:27.238	Signal	-	-	-
Heavertel Convolution	14-05-2016 15:35:57.574	Voltage Sag	88.0% L	0.12	1241
Radlux Site	14-05-2016 15:37:56.5	Voltage Sag	88.8% L	0.12	1241
PSL_Mat_Telescope	11-09-2016 15:00:28.888	Signal	-	-	-
PSL_Mat_Telescope	10-09-2016 15:00:27.237	Resonance Change	-	-	1224
PSL_Mat_Telescope	10-09-2016 15:18:38.348	Voltage Sag	48.1% L	0.11	1214
Radlux Site	10-09-2016 15:18:59.667	Voltage Sag	48.8% L	0.11	1214

Event Summary List
Activated



SORT BY NAME

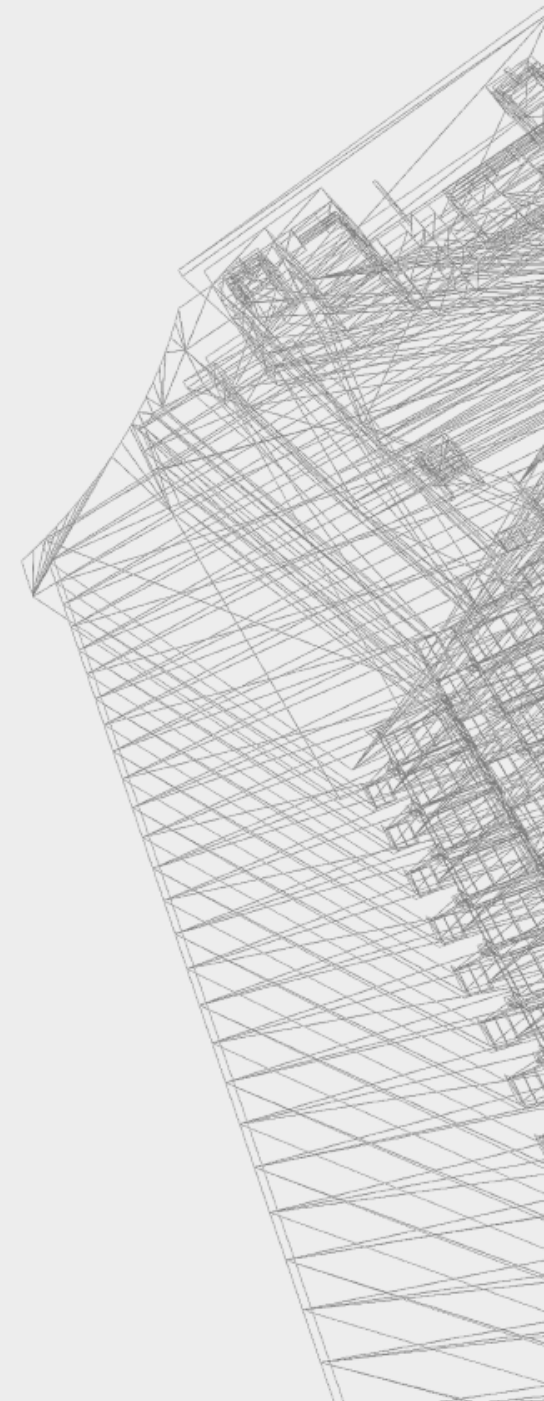
Rooftop Solar Site in Croatia

PQube name	Timestamp	Event type	Magnitude	Duration [s]
PSL Main Entrance	27/05/2016 12:00:38.848	Snapshot	-	-
PSL Main Entrance	26/05/2016 12:00:38.285	Snapshot	-	-
PSL Main Entrance	26/05/2016 11:45:25.677	Probe A Mechanical Shock	-	-
PSL Main Entrance	26/05/2016 11:04:21.062	Probe A Mechanical Shock	-	-
PSL Main Entrance	26/05/2016 10:54:10.187	Probe A Mechanical Shock	-	-
PSL Main Entrance	25/05/2016 12:00:37.230	Snapshot	-	-
Household Consumption	24/05/2016 14:06:41.563	Voltage Sag	84.76 %	0.35
Household Consumption	24/05/2016 13:43:47.574	Voltage Sag	84.14 %	0.41
PSL Main Entrance	24/05/2016 12:00:36.644	Snapshot	-	-
Household Consumption	24/05/2016 08:50:18.596	Voltage Sag	47.96 %	0.17
Rooftop Solar	24/05/2016 08:49:56.869	Voltage Sag	47.77 %	0.17
PSL Main Entrance	23/05/2016 12:00:35.588	Snapshot	-	-
PSL Main Entrance	23/05/2016 11:54:13.933	Probe A Mechanical Shock	-	-
PSL Main Entrance	22/05/2016 12:00:34.843	Snapshot	-	-
PSL Main Entrance	21/05/2016 12:00:33.607	Snapshot	-	-
PSL Main Entrance	20/05/2016 12:00:32.770	Snapshot	-	-
PSL Main Entrance	19/05/2016 12:00:31.758	Snapshot	-	-
PSL Main Entrance	19/05/2016 12:00:31.758	Snapshot	-	-

Double click on column
[PQube name]

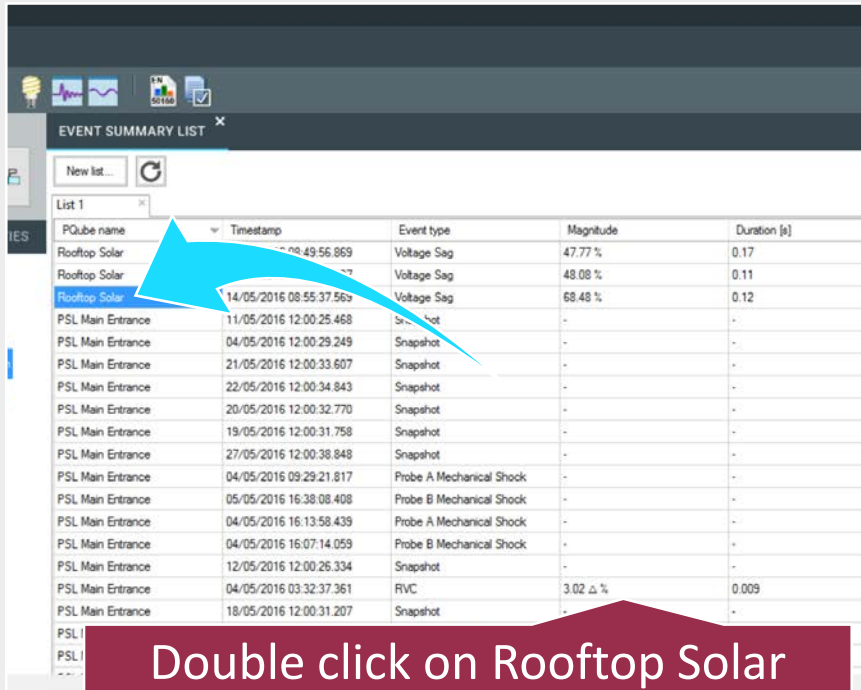
PQube name	Timestamp	Event type	Magnitude	Duration [s]
Rooftop Solar	24/05/2016 08:49:56.869	Voltage Sag	47.77 %	0.17
Rooftop Solar	13/05/2016 01:51:36.897	Voltage Sag	48.08 %	0.11
Rooftop Solar	14/05/2016 08:55:37.569	Voltage Sag	68.48 %	0.12
PSL Main Entrance	11/05/2016 12:00:25.468	Snapshot	-	-
PSL Main Entrance	04/05/2016 12:00:29.249	Snapshot	-	-
PSL Main Entrance	21/05/2016 12:00:33.607	Snapshot	-	-
PSL Main Entrance	22/05/2016 12:00:34.843	Snapshot	-	-
PSL Main Entrance	20/05/2016 12:00:32.770	Snapshot	-	-
PSL Main Entrance	19/05/2016 12:00:31.758	Snapshot	-	-
PSL Main Entrance	27/05/2016 12:00:38.848	Snapshot	-	-
PSL Main Entrance	04/05/2016 09:29:21.817	Probe A Mechanical Shock	-	-
PSL Main Entrance	05/05/2016 16:38:08.408	Probe B Mechanical Shock	-	-
PSL Main Entrance	04/05/2016 16:13:58.439	Probe A Mechanical Shock	-	-
PSL Main Entrance	04/05/2016 16:07:14.059	Probe B Mechanical Shock	-	-
PSL Main Entrance	12/05/2016 12:00:26.334	Snapshot	-	-
PSL Main Entrance	04/05/2016 03:32:37.361	RVC	3.02 Δ %	0.009
PSL Main Entrance	18/05/2016 12:00:31.207	Snapshot	-	-

Other sorting options



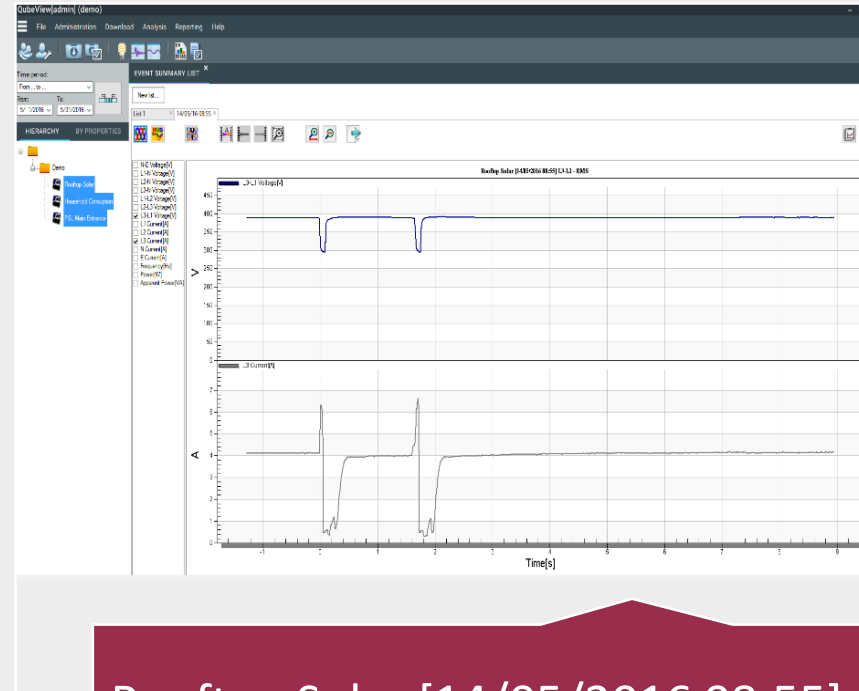
VIEWING A SAG

Rooftop Solar Site in Croatia

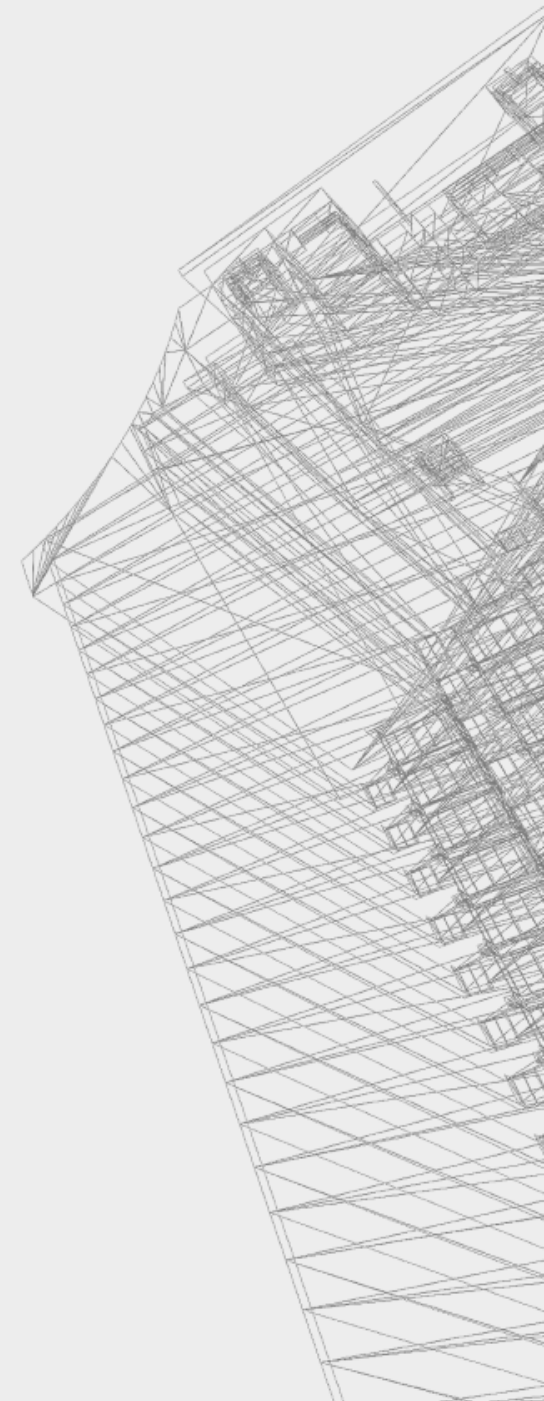


PQube name	Timestamp	Event type	Magnitude	Duration [s]
Rooftop Solar	14/05/2016 08:55:37.569	Voltage Sag	68.48 %	0.12
Rooftop Solar	14/05/2016 08:55:37.569	Voltage Sag	48.08 %	0.11
Rooftop Solar	14/05/2016 08:55:37.569	Voltage Sag	47.77 %	0.17
PSL Main Entrance	11/05/2016 12:00:25.468	Snapshot	-	-
PSL Main Entrance	04/05/2016 12:00:29.249	Snapshot	-	-
PSL Main Entrance	21/05/2016 12:00:33.607	Snapshot	-	-
PSL Main Entrance	22/05/2016 12:00:34.843	Snapshot	-	-
PSL Main Entrance	20/05/2016 12:00:32.770	Snapshot	-	-
PSL Main Entrance	19/05/2016 12:00:31.758	Snapshot	-	-
PSL Main Entrance	27/05/2016 12:00:38.848	Snapshot	-	-
PSL Main Entrance	04/05/2016 09:29:21.817	Probe A Mechanical Shock	-	-
PSL Main Entrance	05/05/2016 16:38:08.408	Probe B Mechanical Shock	-	-
PSL Main Entrance	04/05/2016 16:13:58.439	Probe A Mechanical Shock	-	-
PSL Main Entrance	04/05/2016 16:07:14.059	Probe B Mechanical Shock	-	-
PSL Main Entrance	12/05/2016 12:00:26.334	Snapshot	-	-
PSL Main Entrance	04/05/2016 03:32:37.361	RVC	3.02 Δ %	0.009
PSL Main Entrance	18/05/2016 12:00:31.207	Snapshot	-	-

Double click on Rooftop Solar
14/05/2016 08:55:37.569
Voltage Sag Event

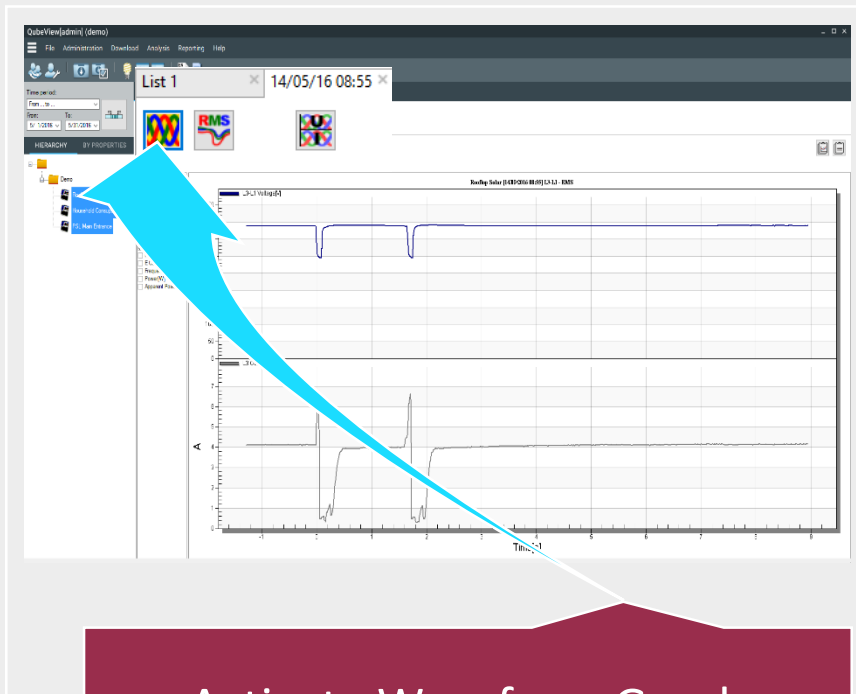


Rooftop Solar [14/05/2016 08:55:37.569]
L3-L1 RMS Graph

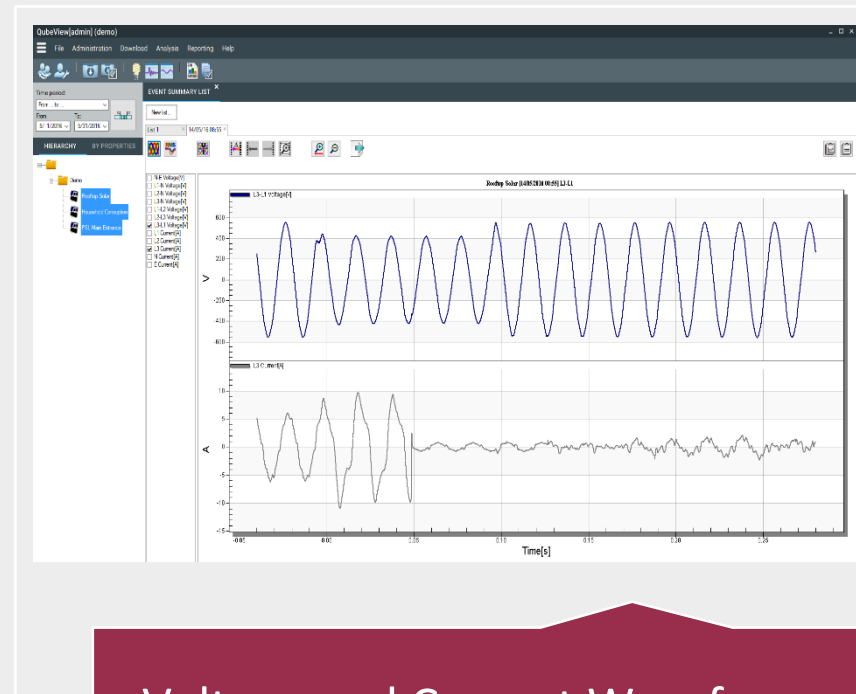


VIEWING A SAG

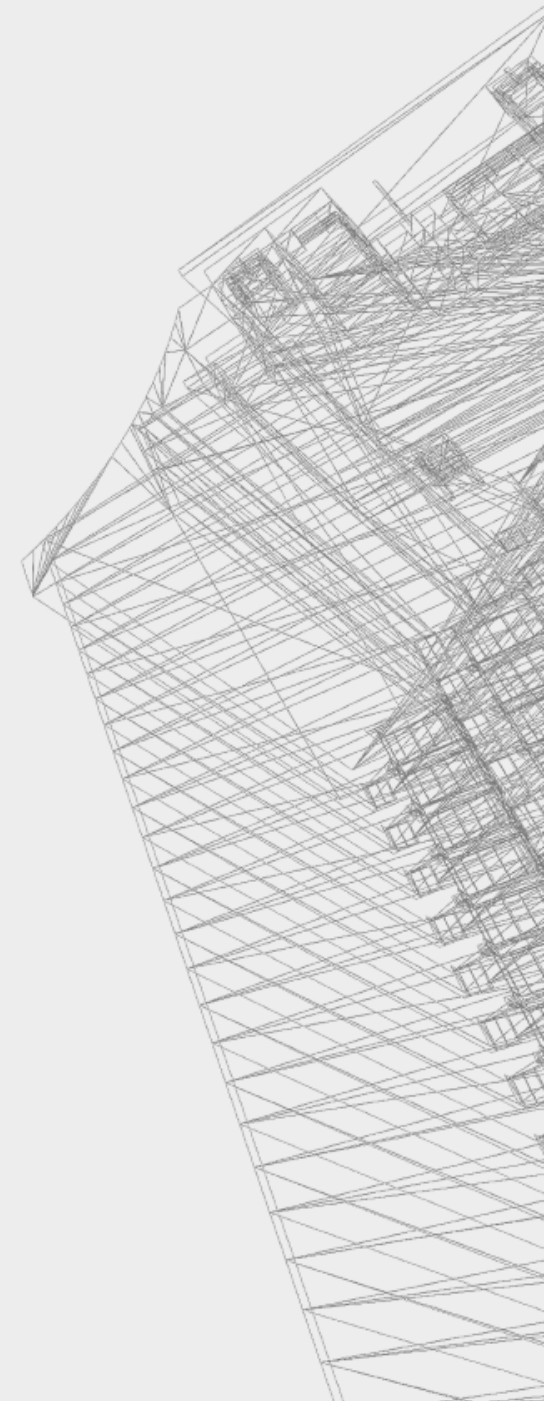
Rooftop Solar Site in Croatia



Activate Waveform Graph
Click Here

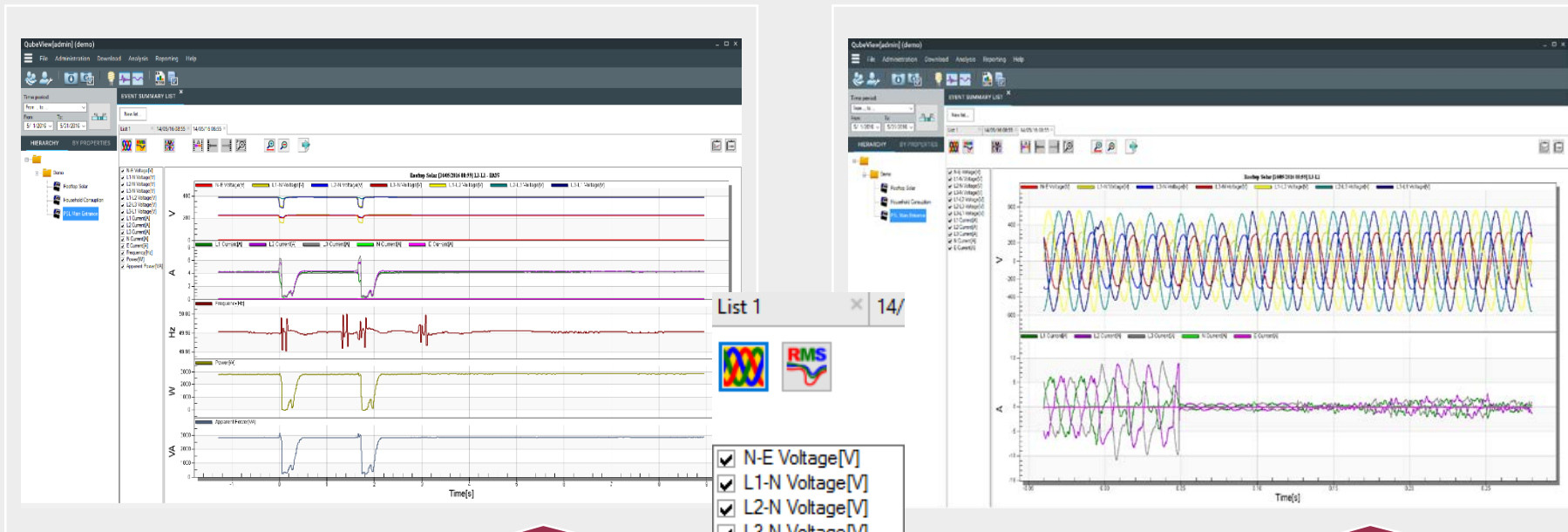


Voltage and Current Waveform
View



VIEWING A SAG

Rooftop Solar Site in Croatia



Now have some fun
try turning all the channels on

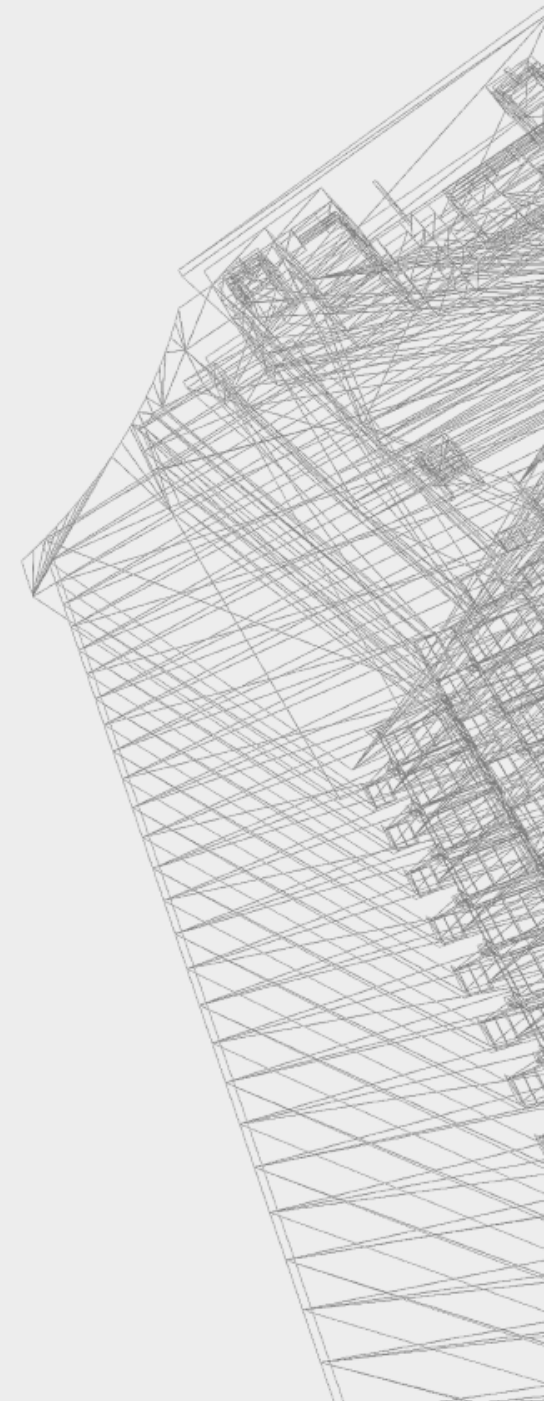
Click →

Switch from RMS
To Waveform

Click →

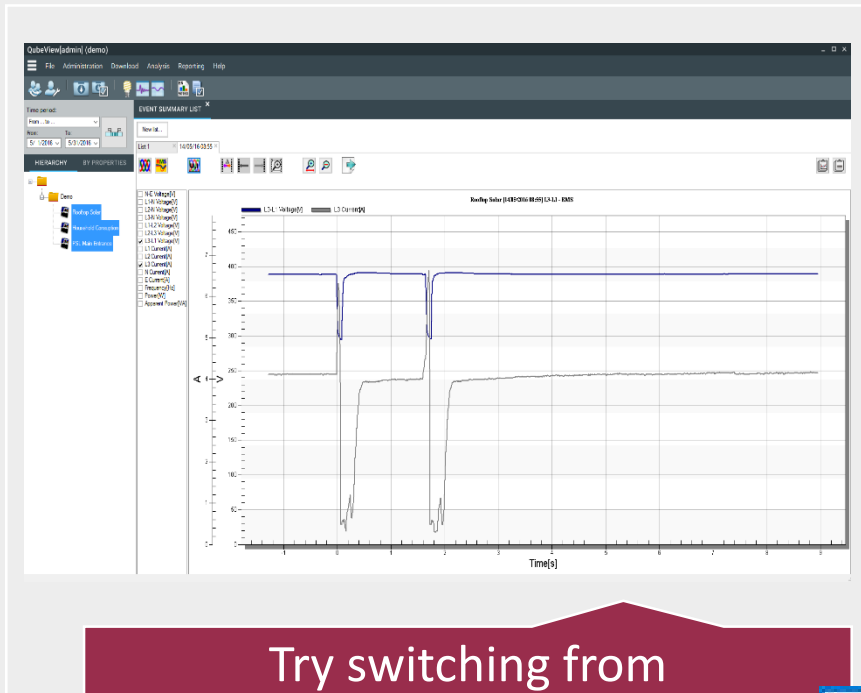
List 1 × 14/

- N-E Voltage[V]
- L1-N Voltage[V]
- L2-N Voltage[V]
- L3-N Voltage[V]
- L1-L2 Voltage[V]
- L2-L3 Voltage[V]
- L3-L1 Voltage[V]
- L1 Current[A]
- L2 Current[A]
- L3 Current[A]
- N Current[A]
- E Current[A]

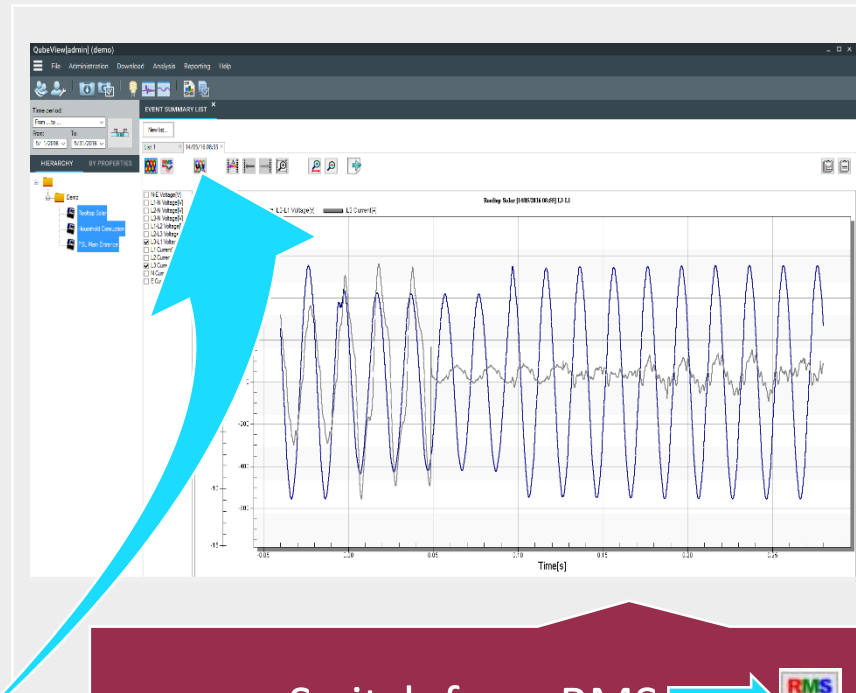


VIEWING A SAG

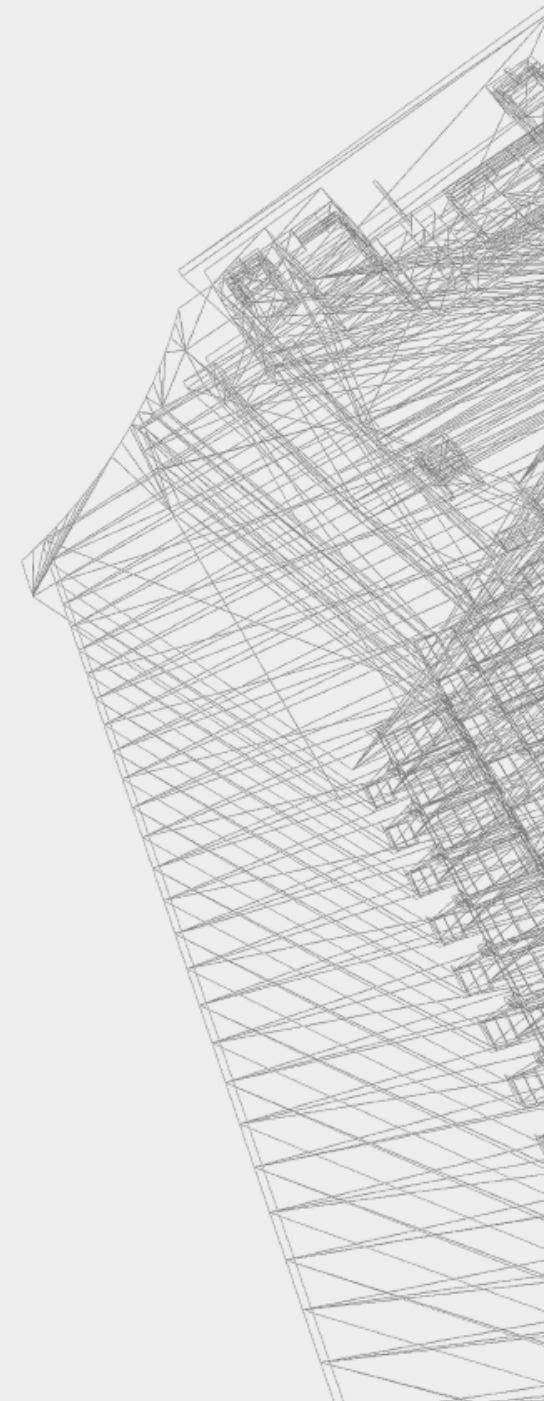
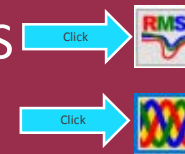
Rooftop Solar Site in Croatia



Try switching from
Double to Single
Graph

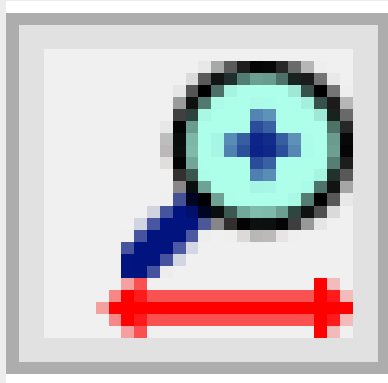


Switch from RMS
To Waveform

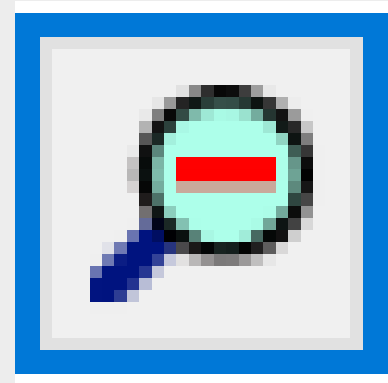


ZOOM MODE

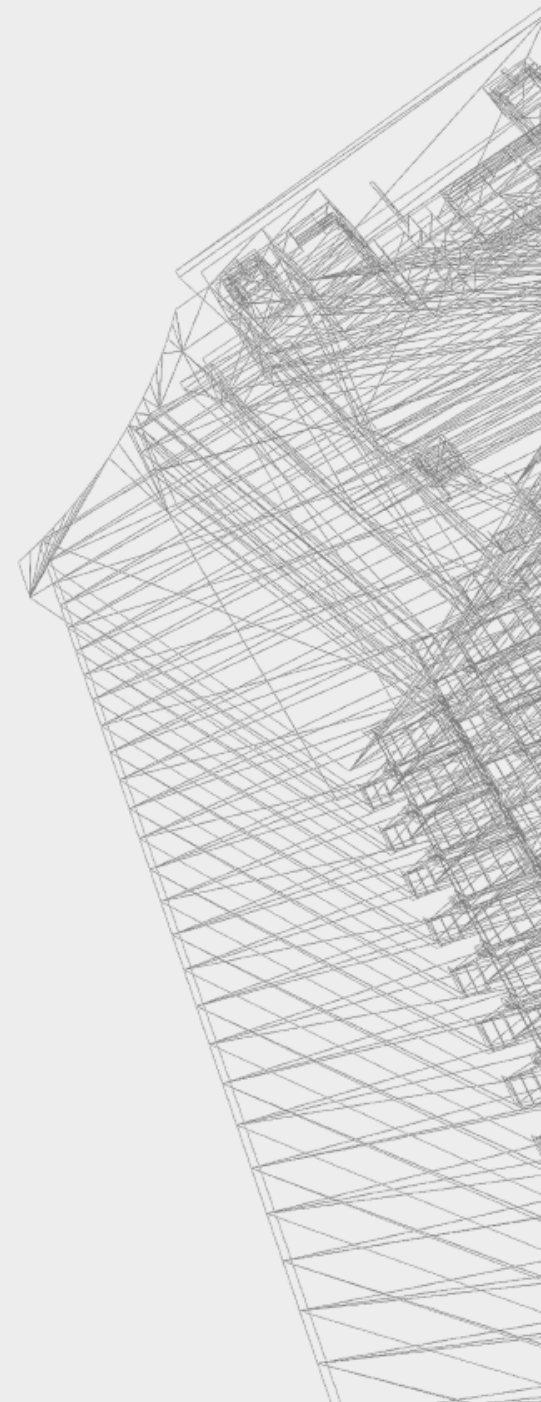
Rooftop Solar Site in Croatia



Click on the Zoom button
Until it looks like the one
above

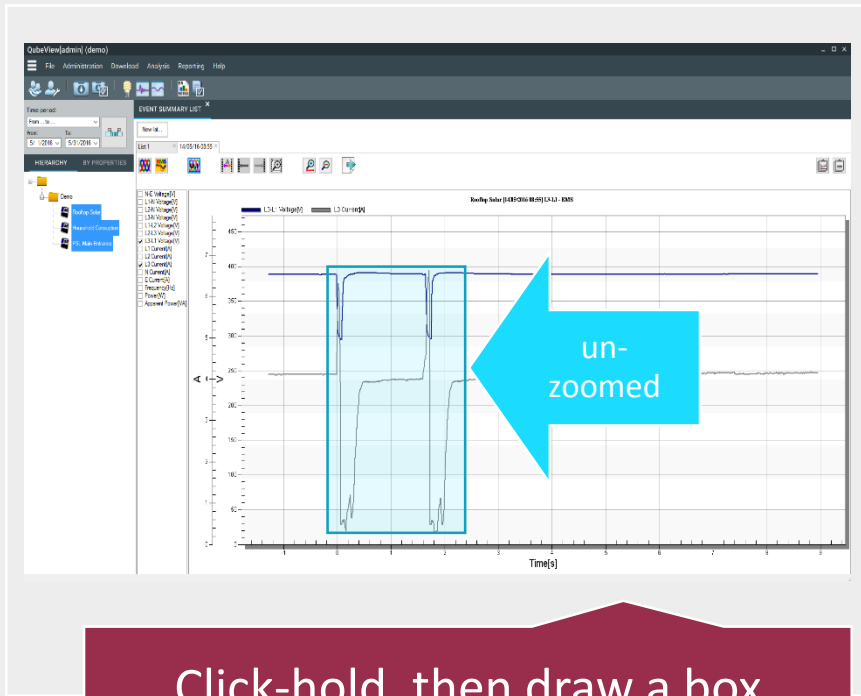


If you get in trouble
Press the un-zoom
button

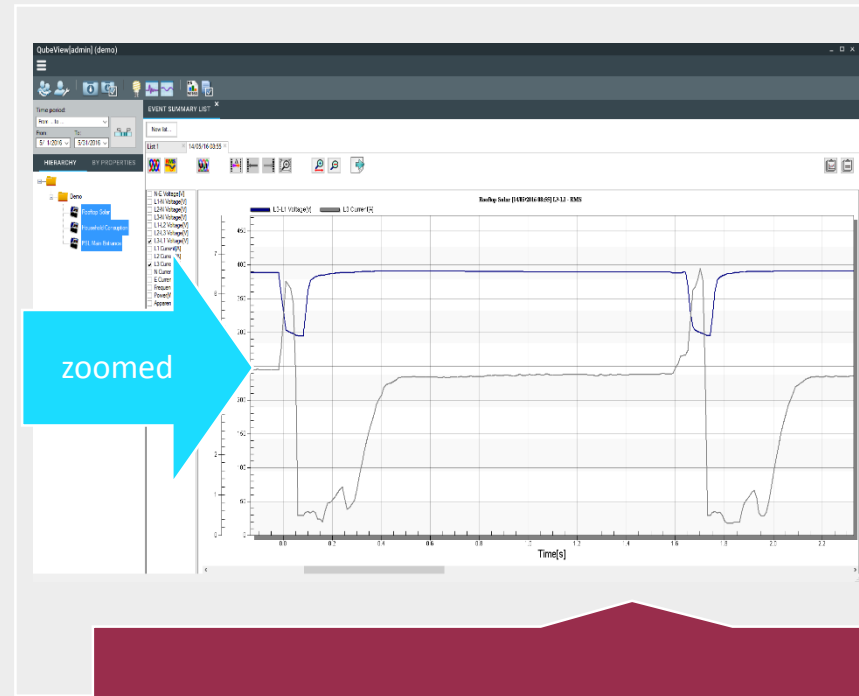


ZOOM MODE

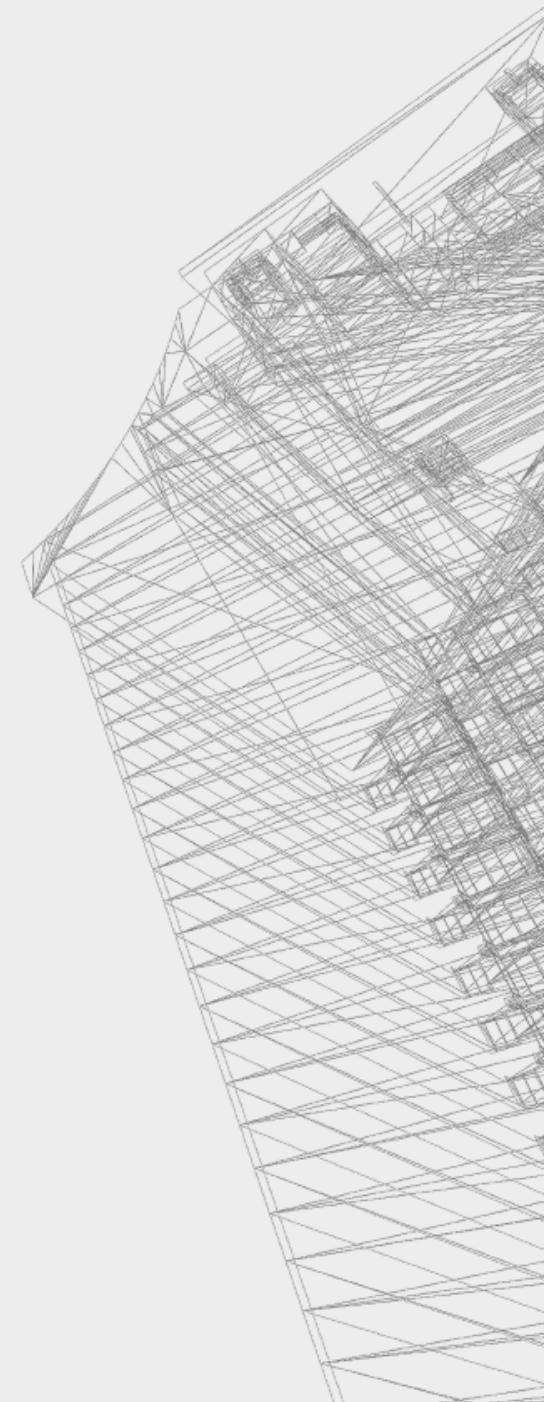
Rooftop Solar Site in Croatia



Click-hold, then draw a box around the two RMS voltage and current, release the click.

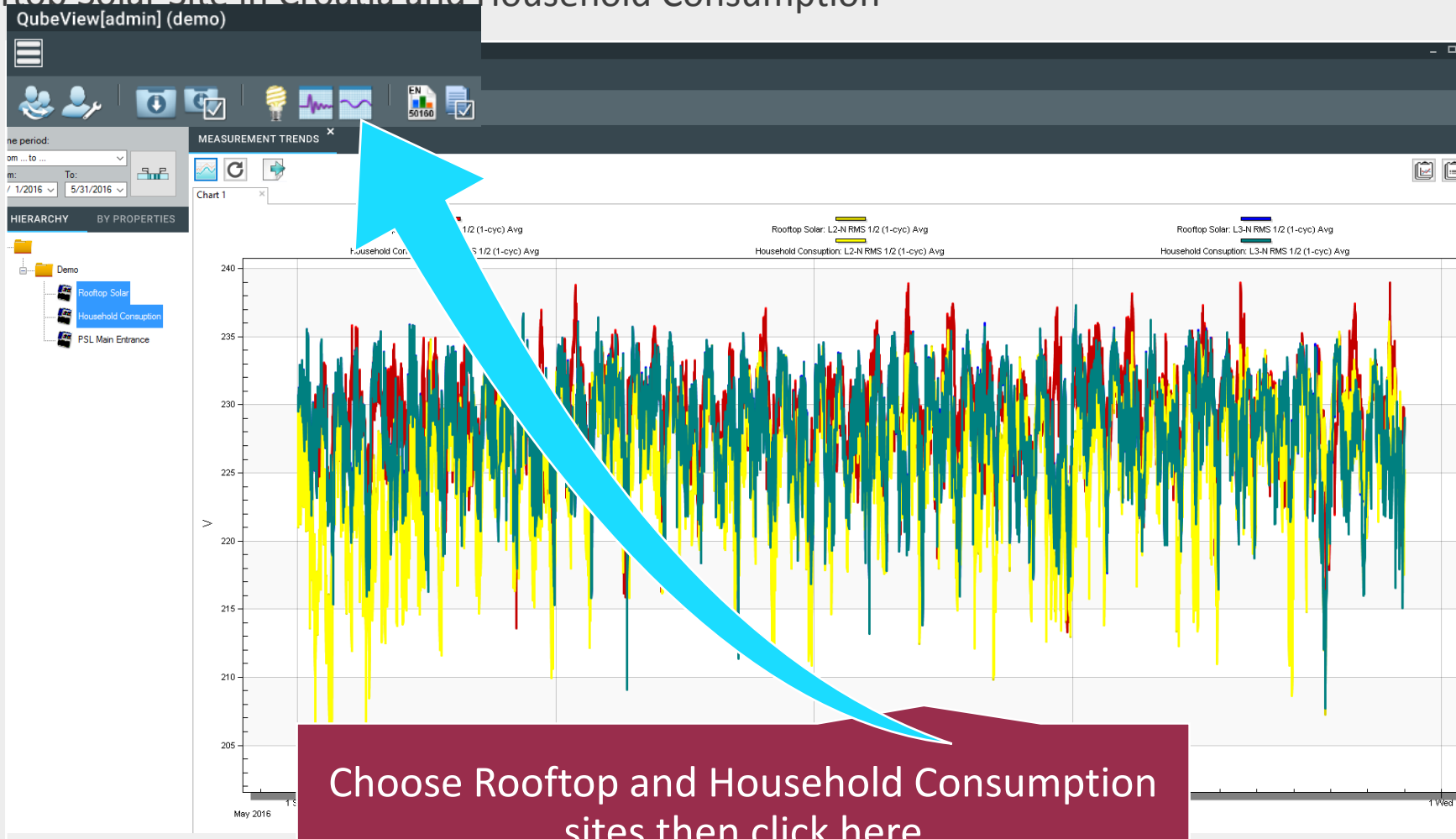


Zoomed Graph

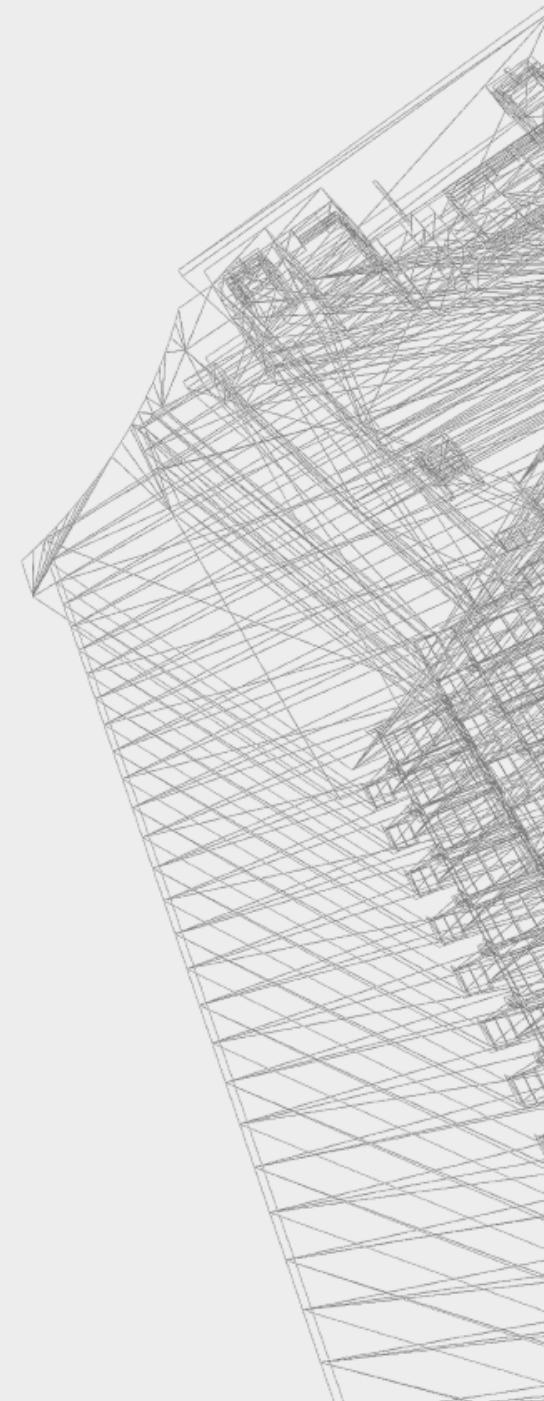


TRENDS FROM TWO DEVICES

Rooftop Solar Site in Croatia and Household Consumption

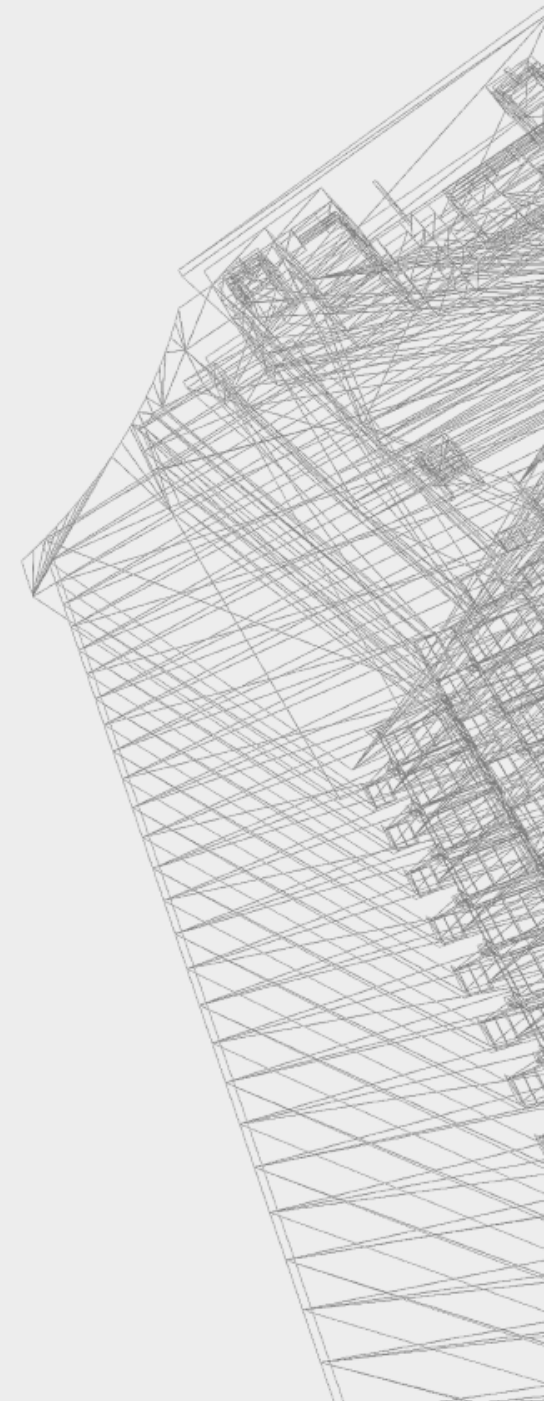
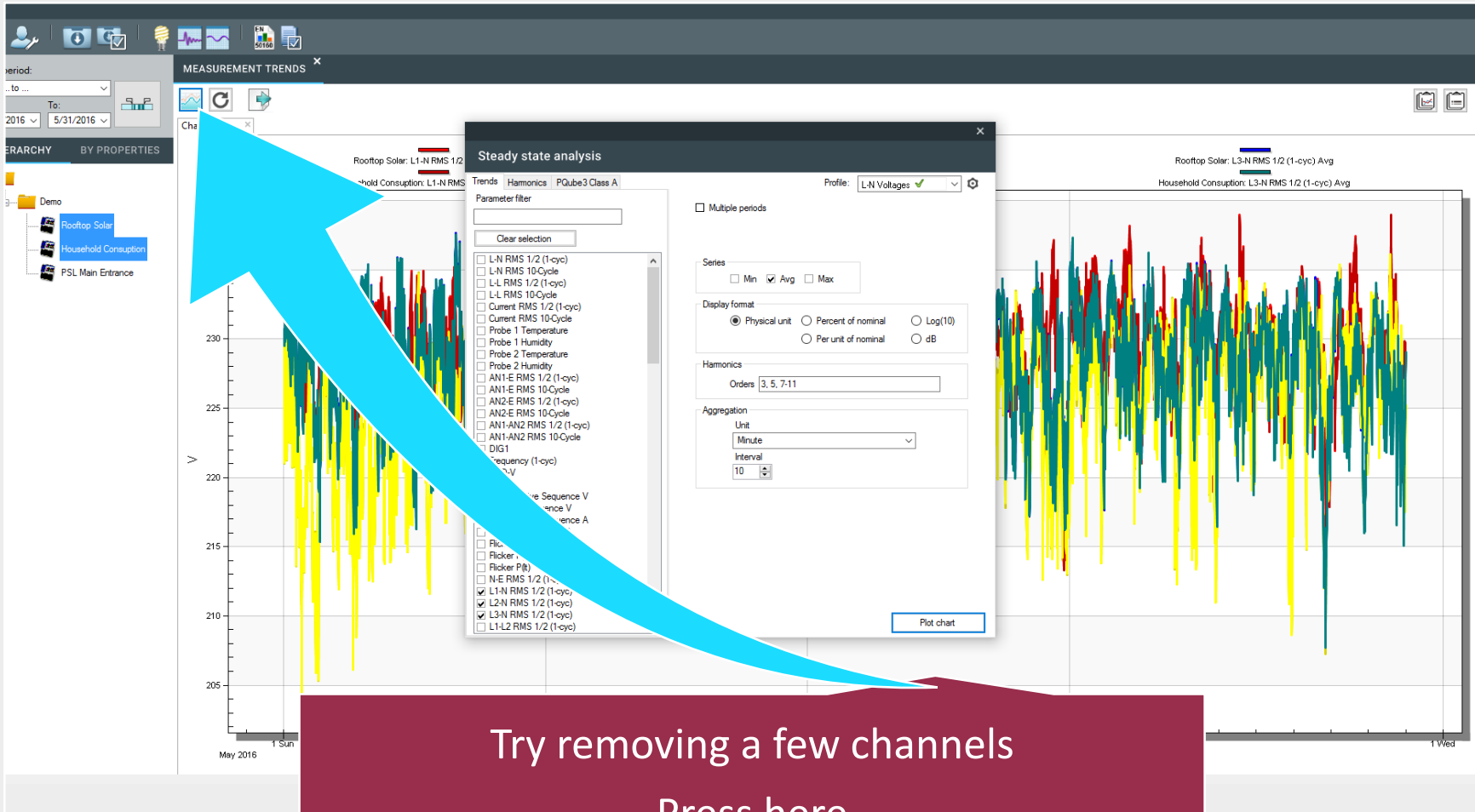


Choose Rooftop and Household Consumption sites then click here



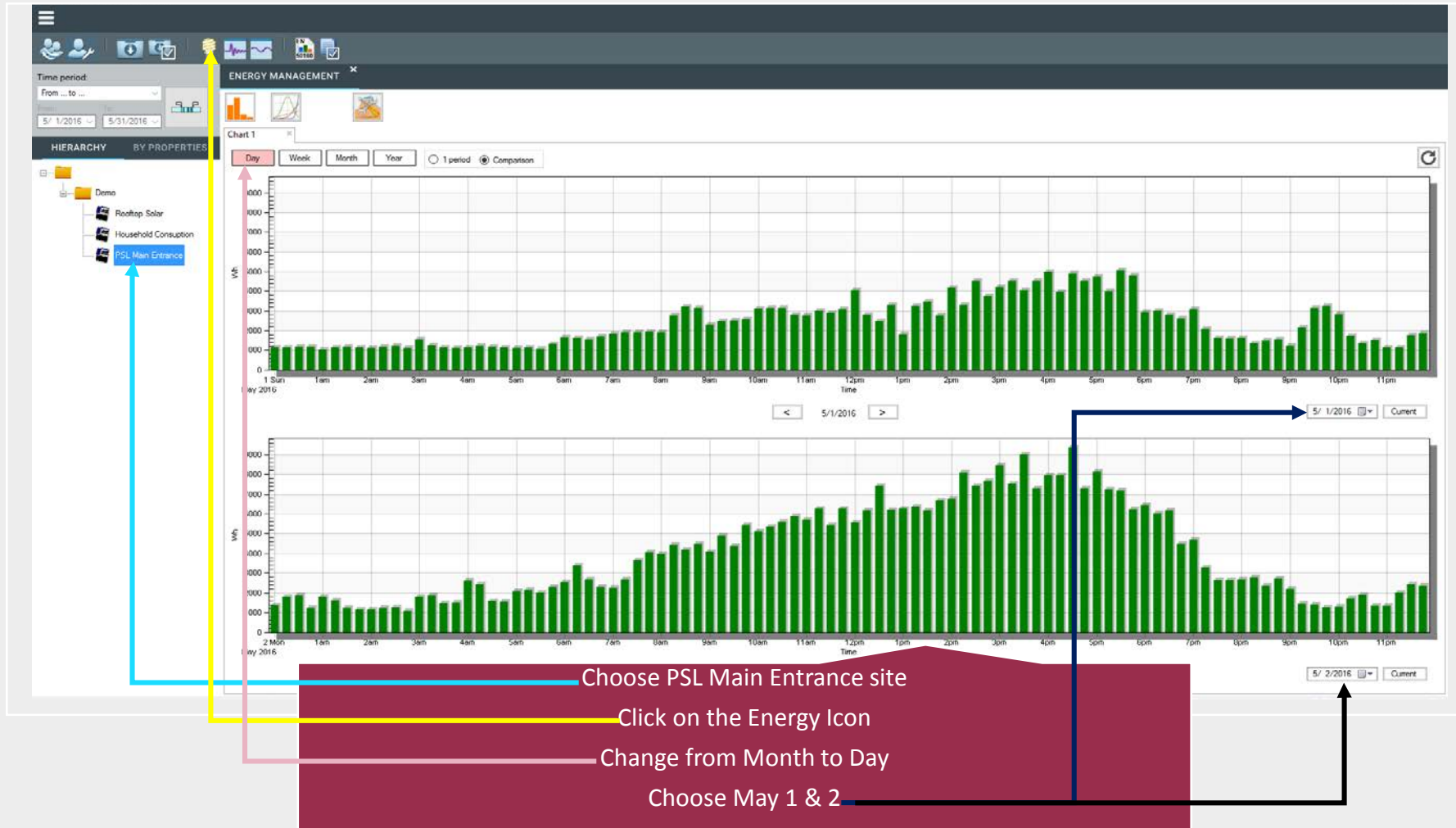
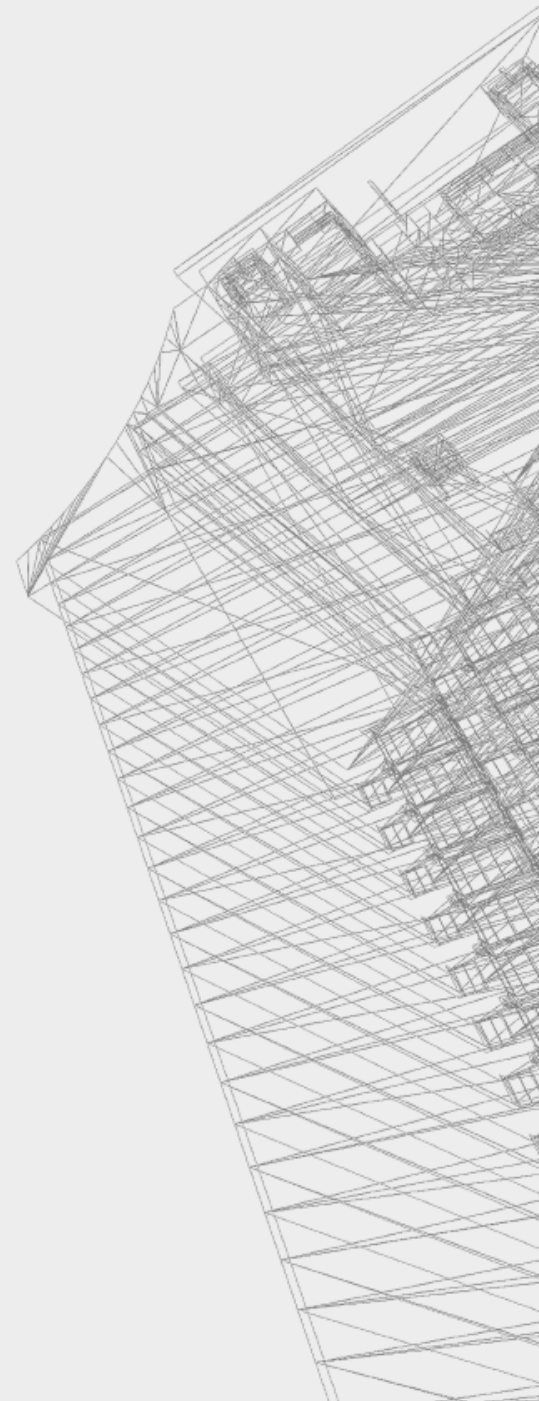
TRENDS FROM TWO DEVICES

Rooftop Solar Site in Croatia and Household Consumption



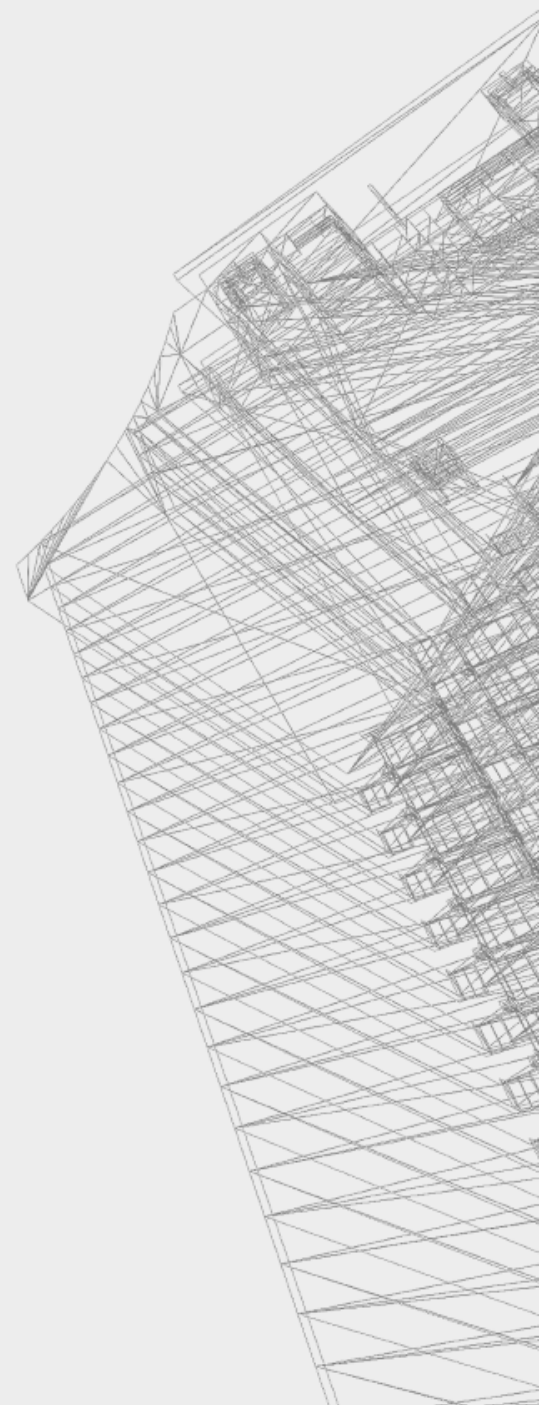
ENERGY MANAGEMENT

PSL Main Service Entrance June 1&2 2016 Comparison



ENERGY MANAGEMENT

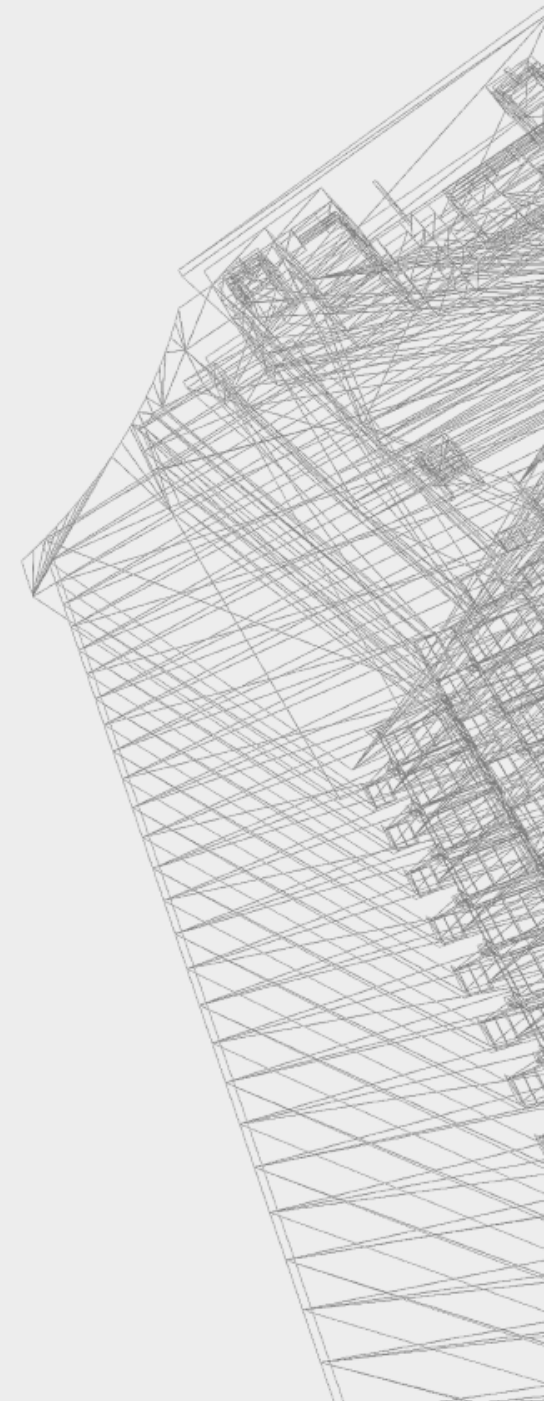
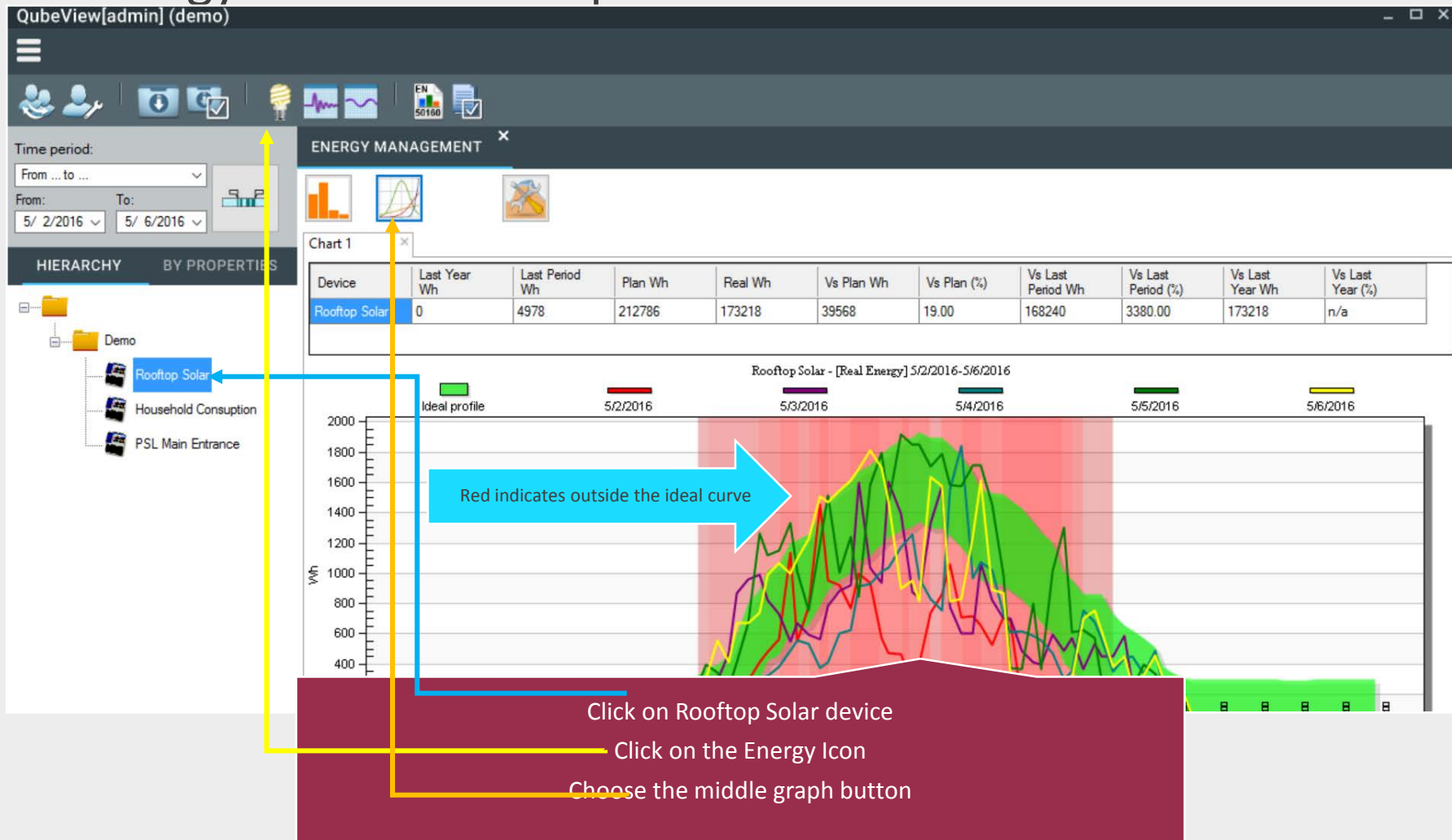
PSL Main Service Entrance June 1&2 2016 Comparison



- Choose all three sites
- Click on the Energy Icon
- Choose Rooftop Solar
- Change the period to 7 Days and click OK

IDEAL PROFILES

Ideal Energy Profiles Rooftop Production

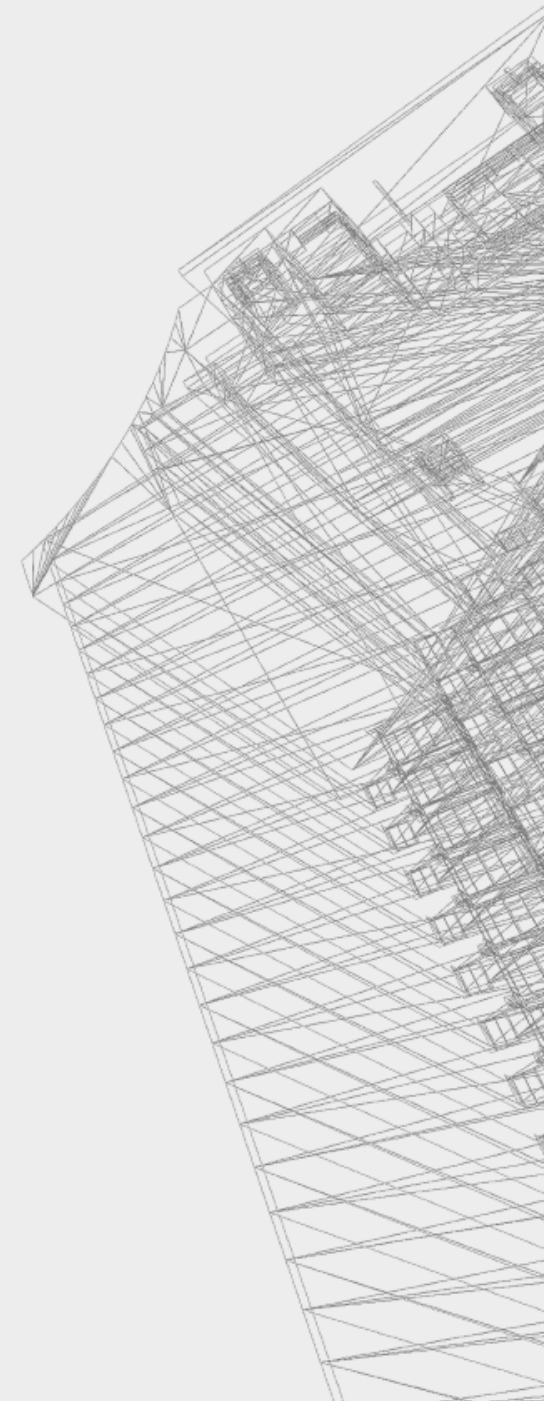


COMPLIANCE REPORT

PSL Main Service Entrance

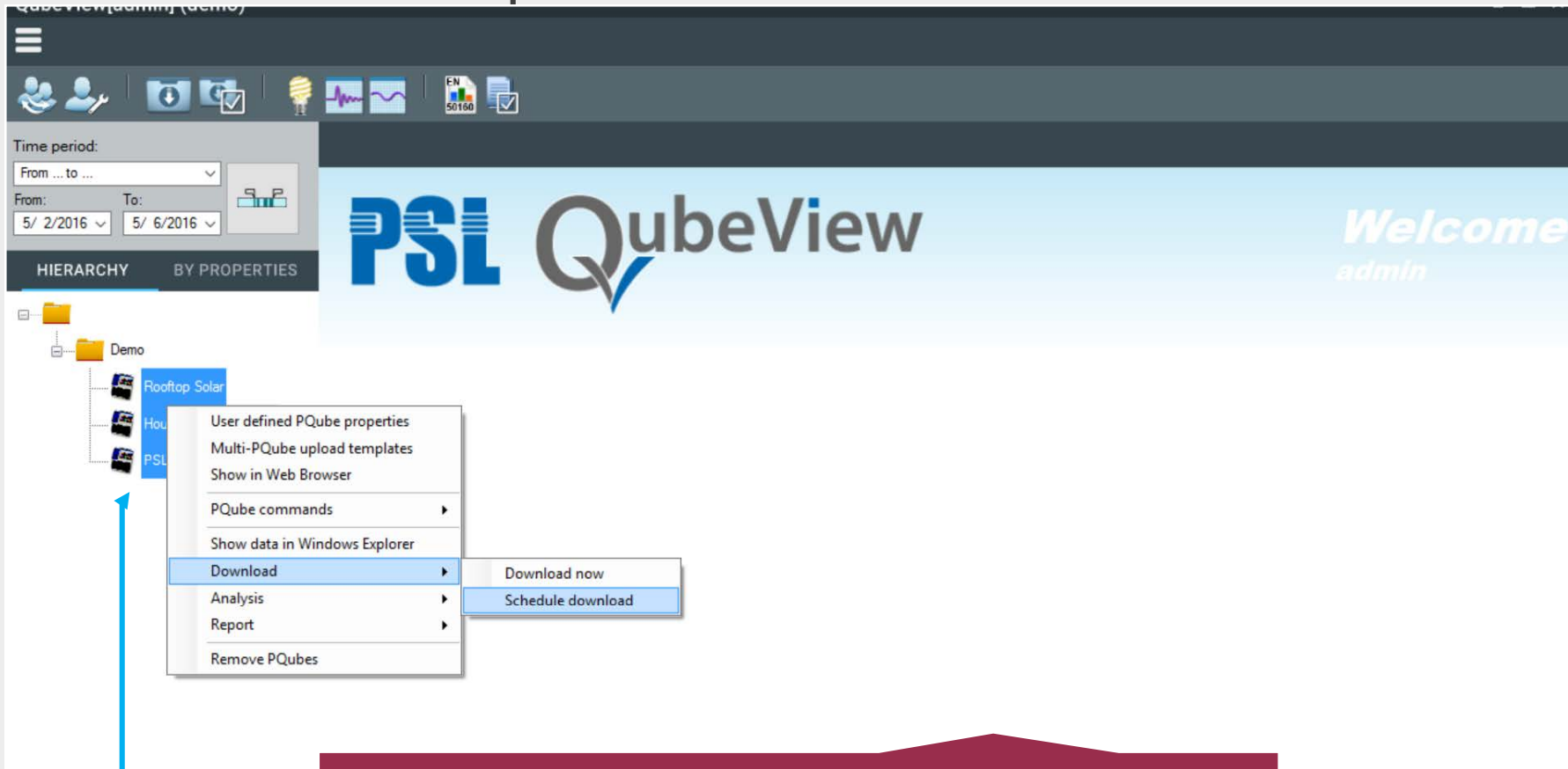
The screenshot shows the QubeView[admin] (demo) application window. On the left, a sidebar displays a hierarchy tree with 'PSL Main Entrance' selected. The main panel is titled 'COMPLIANCE REPORT' and contains 'General settings' and 'Generated report' sections. A 'Report' dialog box is open, showing a file named 'EN 50160 LV.docx'. A red box at the bottom contains the following instructions:

- Choose PSL Main entrance
- Click on the EN50160 Icon
- Change the period to 7 Days and click OK
- Click on the EN50160 LV.docx



OTHER OPTIONS

One or more Sites Options



Choose one or all three Sites
Right Click and Choose Download now or Schedule Download
Feel Free to explore all other options

