

PQ Inspector is divided into 3 steps:

- In **Select time range**, define the observation period and identify possible influencing factors for deviations of the power quality.
- In **Select diagrams**, select the properties of a specific measuring point, and define the diagrams in which you want to show these data items.
- In **Finalize report**, complete your report.

Use the **Select time range** step to view the state of the power quality of the system at a glance. You can set up individual measuring point groups and feature groups so that you can observe critical areas in a targeted manner.

The step **Select diagram** allows the compilation of evaluation diagrams with specific features for a report. The diagrams are represented in a synchronized manner. Hence you can rapidly identify connections in the event of fluctuations in power quality.

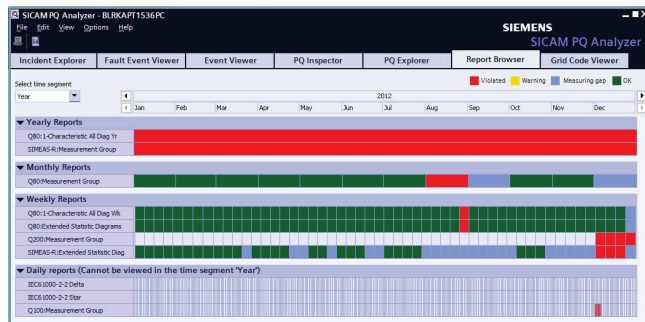
The step **Finalize report** allows reports to be prepared and commented upon.

PQ Explorer

PQ Explorer allows access to all PQ data stored in the archive. It offers a topological view of the measuring points in your plant. Measured and calculated PQ data is evaluated via PQ diagrams. Furthermore, you can generate analysis reports and display these in a preview.

Report Browser

The Report Browser provides an overview of the scheduled reports that are created automatically at specified time intervals (daily, weekly, monthly and yearly). You can view the reports with a viewer, print them and store them for future use.



[sc_pqa_ReportBrowser, 5, en_US]

Figure 3.2/4 Report Browser

In Report Browser, the reports are shown for the selected time range – separated into yearly reports, monthly reports, weekly reports and daily reports. If you select the year time grid you cannot open daily reports. However, you can view the status and the time lapses for which infringement reports are available. Scheduled reports are automatically generated by the SICAM PQS system using the set up report templates. If you set up report templates, among other things define the intervals in which the reports are created, and the PQ devices for which the reports are created. The colors of the reports show their status.

Grid Code Viewer

The Grid Code Viewer displays the Grid Codes defined in SICAM PQS. The Grid Codes include normalized or customer-specifically defined limiting values for evaluating the power quality. The PQ Index is determined from a comparison of the measured values with the limiting values of a Grid Code.

The Grid Code Viewer provides the overview required for a supporting analysis:

- Which Grid Codes are available?
- To which elements in the topology have the Grid Codes been assigned?
- What features do the Grid Codes contain?
- What limits have been defined?

SICAM PQ Collector

The SICAM PQ Collector collects the archive data of the individual (source) archives in a central (collector) archive. Depending on the system configuration, the SICAM PQ Analyzer accesses the data of the (source) archives or (collector) archives for its archive evaluation.

In redundant archive systems, 2 SICAM PQ Collectors are connected. In the event of an interruption of the connection to (source) archives or after the failure of a SICAM PQ Collectors, this permits the archives to be matched, thus reaching an identical and complete contents of both (Collector) archives.

Architecture

- SICAM PAS/PQS with (source) archive and SICAM PQ Analyzer
- System with
 - SICAM PAS/PQS with (source) archive
 - SICAM PQ Analyzer clients
- System with
 - SICAM PAS/PQS
 - Archive servers with (collector) archive
 - SICAM PQ Analyzer clients

The number of components which can be used in a system depends on the individual license.

(Source) archive

SICAM PAS/PQS collects the PQ measured data and fault records from the connected devices and stores them in its local (source) archive. This archive data can be directly evaluated by one or more SICAM PQ Analyzer.

(Collector) archive

In distributed systems with one or several SICAM PAS/PQS, the data of the (source) archives is collected by the SICAM PQ Collector and stored in a central (Collector) archive on an archive computer. This archive data is evaluated by one or more SICAM PQ Analyzer.

Operation, Observation and Diagnosis

SICAM PQ Analyzer – Software and Hardware Requirements

Software and Hardware Requirements

One of the following operating systems is required:

- Windows 10 Professional/Enterprise/IoT Enterprise LTSC (64-bit)
- Windows Server 2019 Standard with Desktop Experience (64-bit)

Computer equipped with:

- Processor:
 - Minimum: Intel Core 2 Duo 1.6 GHz
 - Recommended: Quad Core CPU 3 GHz
- Primary storage capacity:
 - Minimum: 2 GB
 - Recommended: 4 GB
- Hard disk capacity:
 - Minimum: 4 GB
 - (Collector) archive: > 100 GB
- Graphics card:
 - Minimum: 1600 x 1200 pixel
 - Recommended: 1920 x 1200 pixel
- Monitor suitable for graphics card
- DVD drive
- Keyboard
- Mouse
- Network interface
- USB port

SICAM PQ Analyzer is released for computers with multi-core processors. Computers with multi-processor main boards are supported when working in single-processor mode.

Operation, Observation and Diagnosis

SICAM PQ Analyzer – Selection and Ordering Data

Selection and Ordering Data

Description	Versions	Order no.																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Incident Explorer for fault-record analysis		6	M	D	5	5	3	0	-	0	A	A	1	0	-	3	□	□	0
Including Fault Event Viewer for displaying fault events, and Event Viewer for displaying fault events															▲	▲	▲		
	Version 3.1x														3				
	Use on the SICAM PAS/PQS Full Server															A	A		
	Up to 5 clients, archive transfer of 1 Server/Full Server															B	A		
	Up to 5 clients, archive transfer of up to 5 Servers/Full Servers															B	B		
	Up to 5 clients, archive transfer of more than 5 Servers/Full Servers															B	C		
	More than 5 clients, archive transfer of 1 Server/Full Server															C	A		
	More than 5 clients, archive transfer of up to 5 Servers/Full Servers															C	B		
	More than 5 clients, archive transfer of more than 5 Servers/Full Servers															C	C		
Notes:																			
<ul style="list-style-type: none">• 2 redundant PAS/PQS Full Servers are counted as 1 Server.• In addition to fault records, SIMEAS R and SIPROTEC 7KE85 deliver continuous average value reports that are managed in PQ Explorer. => the use of PQ Basic is recommended as a minimum for a complete evaluation of SIMEAS R and SIPROTEC 7KE85 data.																			
PQ Basic		7	K	E	9	2	0	0	-	0	B	A	1	0	-	3	□	□	0
Including Incident Explorer for fault-record analysis and PQ Explorer																▲	▲		
Recommended SICAM PAS/PQS option: Automatic Grid Code evaluation <-> 7KE9000-0BA67-8AA0																			
	Use on the SICAM PAS/PQS Full Server															A	A		
	Up to 5 clients, archive transfer of 1 Server/Full Server															B	A		
	Up to 5 clients, archive transfer of up to 5 Servers/Full Servers															B	B		
	Up to 5 clients, archive transfer of more than 5 Servers/Full Servers															B	C		
	More than 5 clients, archive transfer of 1 Server/Full Server															C	A		
	More than 5 clients, archive transfer of up to 5 Servers/Full Servers															C	B		
	More than 5 clients, archive transfer of more than 5 Servers/Full Servers															C	C		

Table 3.2/1 SICAM PQ Analyzer Selection and Ordering Data