DataView® File Types

AEMC's DataView[®] data analysis software is very versatile. It accepts raw data recorded by a number of AEMC[®] instrument families, and displays that data on your PC in a wide variety of ways. This includes reports formatted with templates that ship with the product; or with templates created and customized by users to suit the specific needs of their facilities.

To accommodate the downloading, storage, manipulation, and display of measurement information, DataView[®] uses a number of different file types and formats. These files, usually identified by extensions specific to DataView[®], can sometimes cause some confusion among new DataView[®] users.

In this article, we review the various file types used by DataView[®]. We define each type, and explain its role within DataView's features and functionality.

The DataView[®] Report Generation Process

As explained in several videos available on AEMC's YouTube channel, the primary purpose of DataView[®] is contained in the product name. The program takes measurement data recorded on your AEMC[®] instrument, and presents it for viewing on a PC.



DataView® reports

There are four main DataView[®] file types involved in this process: .icp, .dvb, .dvt, and .dvw. By default, these files are stored in the computer's Documents folder, in the DataView[®] sub-folder (Documents/ DataView).

- .icp files, also called Instrument Control Panel files, contain the raw data downloaded from the instrument. These files are created when you open the DataView® Control Panel and save downloaded measurement data to the PC. Note that each DataView[®] Control Panel has its own .icp file format. DataView® assigns names to these files as they are created, based on data such as the name of the recording session as it is stored on the instrument, the name of the Control Panel creating the file, and other factors. By default, .icp files are stored in the DataFiles sub-folder in the DataView folder (Documents/DataView/DataFiles).
- .dvb files, also called DataView[®] database files, contain data that has been specially formatted for report generation within DataView[®]. These files are created automatically when you use the DataView[®] interface to create a report from an .icp file. The name of the .dvb file is based on the name of the .icp file. As with .icp files, .dvb files by default are stored in the DataFiles sub-folder (Documents/DataView/DataFiles).
- .dvt files are DataView[®] report templates. These templates determine how the data contained in the .dvb files is organized and displayed. DataView[®] includes a number of standard templates that come with the product. You can also create templates to your own requirements and specifications. Standard templates come with pre-defined names; while custom templates are assigned names by the user who creates them. By default, .dvt files are stored in the Templates sub-folder in the DataView folder (Documents/DataView/Templates).
- .dvw files contain DataView[®] reports.
 Whenever you save a DataView[®] report, the program creates a .dvw file to store it on the PC. The name of the .dvw file is assigned

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by the user when the report is saved. By default, these files are stored in the Reports sub-folder (Documents/DataView/Reports).

The basic process flow is as follows:

- (1) When you open DataView[®] and use the Control Panel to download and save measurement data from your instrument to the PC, the Control Panel creates an .icp file to store this data.
- (2) If you then choose to view this data as a report, DataView[®] creates a .dvb file as the database in which to store the data derived from the .icp file.
- (3) DataView[®] then prompts you to choose a .dvt file as the template to use to select, organize, and display the data in the .dvb file. (4) If you then save the report, DataView[®] creates a .dvw file in which to store it.

Spreadsheets

Downloaded measurement data can also be organized and displayed as a Microsoft Excelcompatible spreadsheet, via the "export to a spreadsheet" option in the Control Panel.

When you do this, the data is stored as either an .xls (Microsoft Excel) or .csv (comma –separated values) file, depending on the Control Panel used. Either file type can be viewed as an Excel-compatible spreadsheet. Although these file types are not unique to DataView[®], they can play an important role in viewing and distributing data recorded by AEMC[®] instruments.

Other DataView® File Types

In addition to the ones mentioned above, there are two other file types associated with DataView®. The first is .dvc, or DataView[®] configuration file. This contains the instrument configuration settings specified by the user through the Control Panel. Some Control Panels allow you to save these settings to a file on your PC, and then use this file for future configuration sessions. This can be useful in situations when you want to configure multiple instruments in exactly the same way.

Also, some long-time users of DataView[®] may have encountered the file type .dvl, or layout file. This file contains layout settings that define how the Control Panel displays data on the PC screen. Layout files are no longer used by more recently developed and released versions of DataView[®] Control Panels, so in most situations it's probably unlikely you'll ever have a need to work with .dvl files.

Summary

The following table lists all the DataView[®] file types described in this article:

| File type | Definition | Contains |
|--------------|---|--|
| .icp | Instrument Control Panel file | Measurement data downloaded from the instrument to the PC |
| .dvb | DataView database | icp data formatted for DataView report. generation |
| .dvt | DataView template | Template for organizing and displaying .dvb data |
| .dvw | DataView report | .dvb data formatted by the selected .dvt template |
| .xls* | Microsoft Excel- compatible spreadsheet | icp data formatted as an Excel- compatible spreadsheet |
| .csv* | Comma-separated values file | .icp data formatted as a "comma separated values" file (viewable as a spreadsheet) |
| .dvc | DataView configuration file | Instrument configuration settings entered through the Control Panel |
| .dvl | DataView layout file | Layout instructions for the Control Panel interface (not used by recently released Control Panels) |

*Not unique to DataView