



Data Reading Program 5059 (DRP 5059) is used to download DSU raw-data via the AADI DSU Reader 2995. Once the raw-data is downloaded it can be converted to engineering data (i.e. cm/s, Deg M, NTU etc.). Both the engineering data and the raw-data can be used as basis for the graph types implemented in DRP5059. If it is necessary to transfer the downloaded data to another application this can be achieved by exporting the data as ASCII.

Both the engineering data and raw-data can be exported. If data has been downloaded and stored as ASCII raw-data with another application, these data can be imported into DRP 5059. DRP 5059 is a multi document application (MDA). This means that one instance of the application can handle several DSUs (one DSU Reader per com-port). It is for this reason also possible to download a DSU while editing and viewing the data from a previous download.

DRP 5059 will fully replace the former Windows 3.1 based DRP 4059, and the dos based DRP 3059. Customers can also expand DRP 5059 by creating their own ActiveX/COM components. The components will have access to the raw-data database and they can display the result in the view.

DRP 5059 can be run on Windows® 98, Windows NT™, Windows 2000, Windows® XP and Windows 7 (XP-mode).

DRP 5059 can be used without purchasing a license. Buying a license will however present a great deal of extra functionality. Without the license, the following tasks can be performed using DRP 5059:

Data Reading Program 5059

A program for reading data stored in the Aanderaa Data Instruments, Data Storage Unit 2990

Features Data Reading Program 5059:

- *Template Library of our standard instruments.*
- *Customer Library to store customers own product specifications*
- *Virtual Sensor*
- *Data analyses*
- *Graphical presentation*
- *Statistical presentation*

- Downloading raw-data from the DSU, via the DSU reader.
- Exporting both engineering data and raw-data to ASCII file.
- Importing from raw-data ASCII files that have been created in another software.
- Using the raw-data list and engineering list view. Editing of the raw data list is also enabled.

These are some of the advantages that one will get when a license is entered into DRP 5059:

- Display multiple raw-data graphs as a function of time.
- Display multiple engineering graphs as a function of time.
- Showing statistics graphs, with standard deviation, max, min, and arithmetic mean value calculations.
- Generating power spectrum graphs using Fast Fourier Transformation.
- Displaying interdependency graphs using one parameter as the independent axis.
- Displaying progressive vector plots of current vectors generated by Aanderaa current meters.
- Access the systems database, the station template library and the sensor template library.
- The possibility of creating custom virtual channels using the function editor.
- Using DRP 5059 in datalogger mode. That is, watch data as they arrive from deck-unit, sensor scanning unit 3010 and datalogger 3660/3664.

There will be a free 30 day trial period, where DRP 5059 acts as if it has the license key

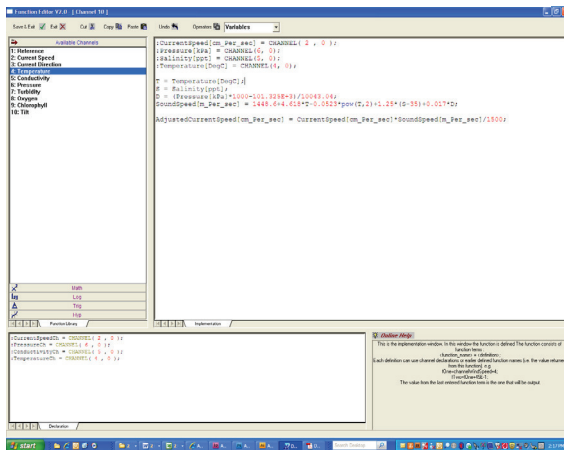
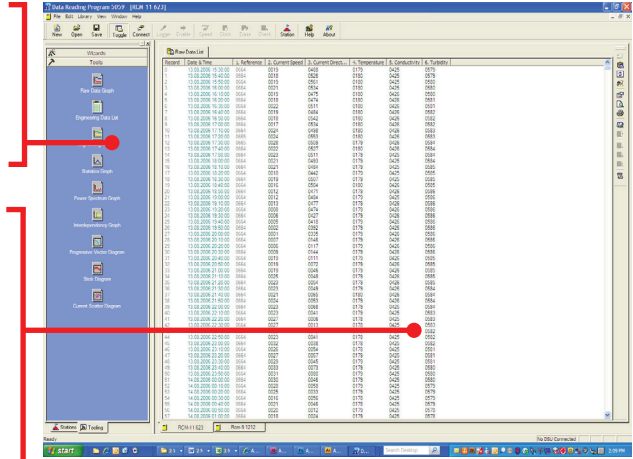
DRP 5059 Features

The control center

The control center is where most of the DRP5059 functionality is located. From the control center the user can initiate tools and wizards for post processing of the collected data. Another powerful feature located in the control center is the systems database.

The view

This is where all the requested information is displayed. The raw-data list, the engineering list and all the supported graph types will be displayed in the view. Switch between the views and between the lists by clicking the corresponding tab at the top of the view. More than one document can be opened in one instance of the software. Switch between the open documents by using the tabs on the bottom of the view.



The virtual channels

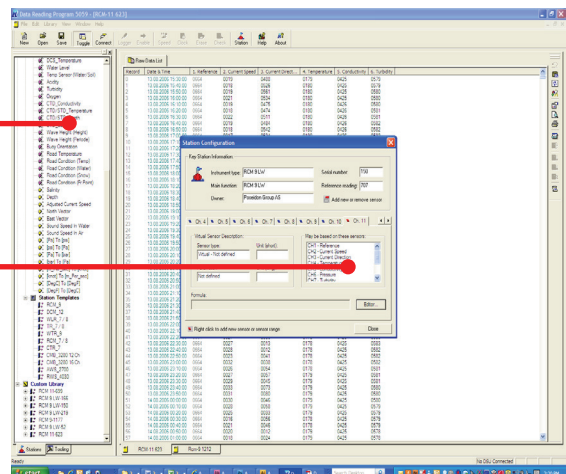
A virtual channel consists of a mathematical function whose arguments are collected from existing sensor channels. First assign variables to the channels that are to be used as basis for the calculation, then use the variables in the custom made mathematical function. The virtual formula supports sin, cos, tan, asin, acos, atan, exp, lg, ln, abs, pow (x raised to the power of y) and sqrt (square root of x), and also of cause the standard mathematical operators +, -, * (multiply), / (divide).

The Systems Database

This is located in the control center. The systems database contains a template library. In this library one will find templates of all Aanderaa sensors, stations and instruments. There is also included commonly used virtual channels. This includes the salinity, north/east component extraction, conversion between pressure units and conversion between temperature units. It is also possible to create custom virtual sensor templates and a custom station/instrument library.

The Station Configuration Dialog

When entering the station configuration dialog, all the setup information about the chosen station becomes available for editing. This includes general information about the station as well as information about every sensor connected to the instrument. The setup information includes instrument/station type, main function of station, owner of station, serial numbers, reference reading, sensor type and parameters, calibration date, sensor units, calibration coefficients and virtual channels.

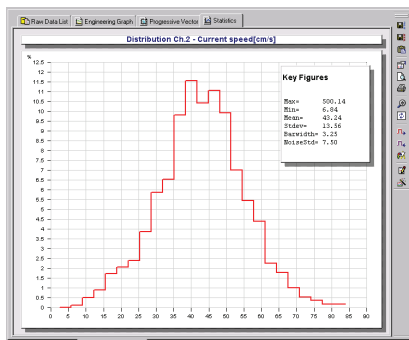


DRP 5059 Supported Graph



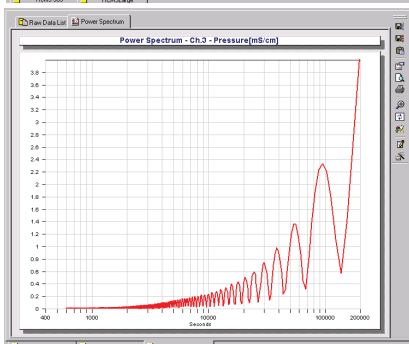
Engineering graph

Shows a standard graph of the selected parameter (parameter as a function of time). Several parameters can be displayed simultaneously. Even graphs in another open document can be displayed in the same graph. By using the mouse you can zoom into any part of the graph.



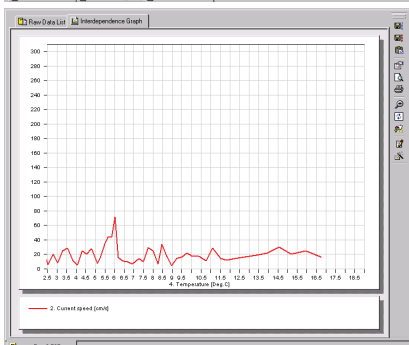
Statistics graph

Shows the distribution for the selected parameter in percent. You also obtain the standard deviation, the arithmetic mean value, the maximum value and the minimum value. Both the engineering data and the raw data can be used as basis for this graph.



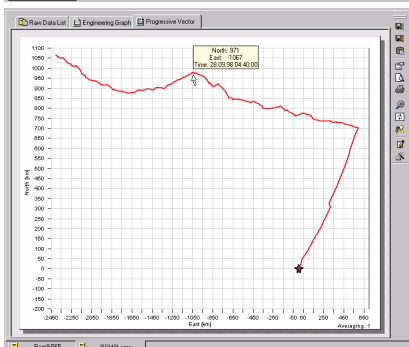
Power spectrum graph

This graph shows the frequency spectrum of the selected parameter using FFT analysis. The following FFT windowing is available: Square (none), Hanning, Hamming, Gaussian and Taperd. The X-axis can be shown both as frequency in mHz or as periods in seconds. To get a more complete view, the X-axis can be displayed using a logarithmic scale. Both the raw data and engineering data can be used as basis for this graph.



Interdependency Graph

The interdependency graph is used when parameters are viewed as a function of another parameter. These graphs can be shown as scatter plots or as line plots. If for example a parameter is to be viewed as a function of water depth, it is also possible to switch the independent channel to the Y-axis.

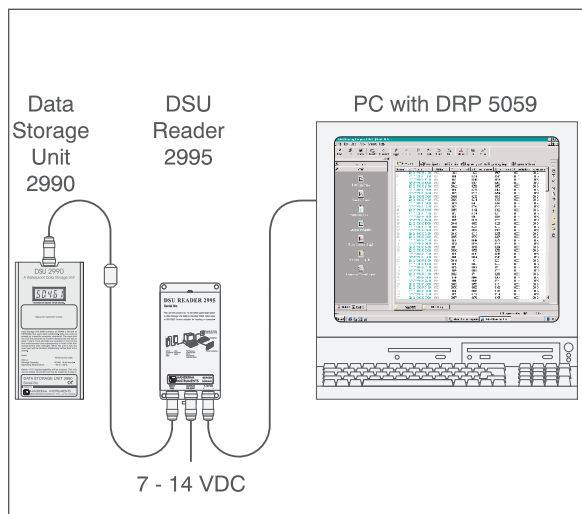


Progressive vector plot

This plot is used to display current vectors. All the vectors are placed in series to show the movement of water volumes. All the Aanderaa current meters are preset in the software. Simply select the instrument from which the data was downloaded, and a progressive vector plot is generated.

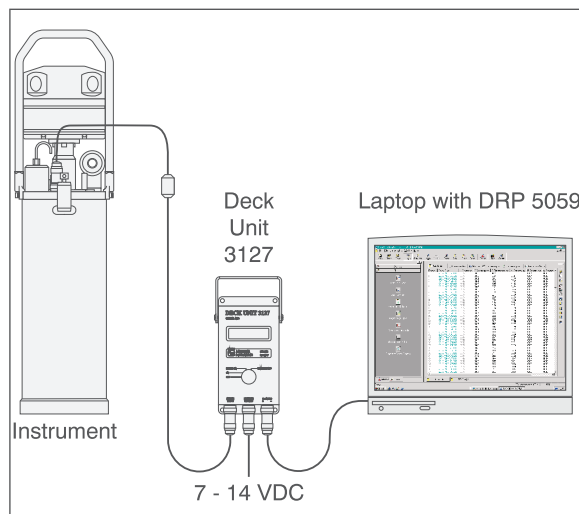
Program 5059

Downloading a DSU

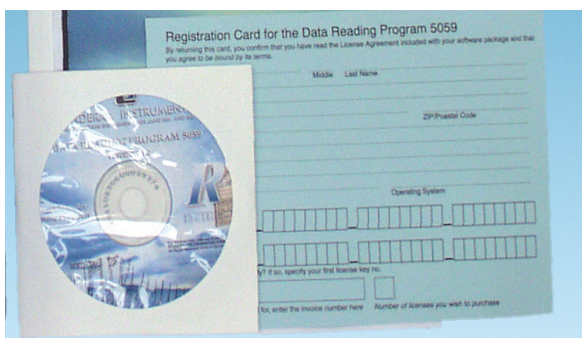


Data is downloaded from the DSU to a PC with DRP 5059

Previewing Data in Datalogger Mode



Data records are added to DRP 5059 as the instrument outputs new data. Click on the DRP 5059 graph tools to quickly get a graphical representation of the collected data.



How to obtain DRP5059

The application can be purchased directly from us or from one of our distributors. The application is also available from our web page <http://www.aadi.no>

When purchasing a DSU Reader 2995 the DRP5059 will also be included in the package (The program is in the non-licensed level when delivered with the DSU Reader or downloaded via the web).

The program is delivered on CD containing

- Software
- Operating Manual, TD 208,
- Data Sheet
- (When License is purchased)
- 1 ea " How to obtain a license" note.
- 1 ea Registration Card, Form 603
- 1 ea License Sheet

Miscellaneous up to date info, such as Data Sheets, Latest Newsletter, etc.

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Let's Solve Water

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