

Product Datasheet - Technical Specifications



More information in our Web-Shop at ► www.meilhaus.com and in our download section.

Your contact

**Technical and commercial sales, price information,
quotations, demo/test equipment, consulting:**

Tel.: **+49 - 81 41 - 52 71-0**

FAX: **+49 - 81 41 - 52 71-129**

E-Mail: sales@meilhaus.com

Downloads:

www.meilhaus.com/en/infos/download.htm

Meilhaus Electronic GmbH
Am Sonnenlicht 2
82239 Alling/Germany

Tel. **+49 - 81 41 - 52 71-0**
Fax **+49 - 81 41 - 52 71-129**
E-Mail sales@meilhaus.com

Mentioned company and product names may be registered trademarks of the respective companies. Prices in Euro plus VAT. Errors and omissions excepted.
© Meilhaus Electronic.

www.meilhaus.de

Xviewer

PC Software for DL Series Instruments

YOKOGAWA 



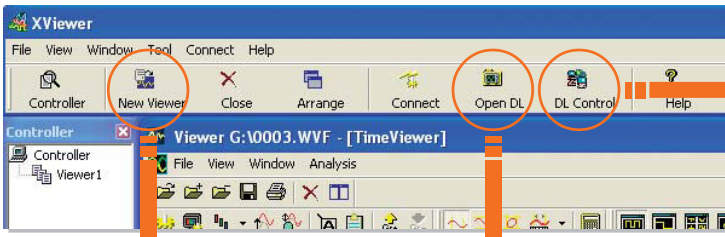
Xviewer is a PC software application designed to work with Yokogawa's DL series digital oscilloscopes and the DL750 series ScopeCorders. Xviewer allows you to display DL-acquired waveform data (using the "Viewer" function), perform file transfers, and control DL series instruments remotely.

In addition to simply displaying the waveform data, Xviewer features many of the same functions that the DL series instruments offer: zoom display, cursor measurements, calculation of waveform parameters, and powerful waveform math (waveform math is available only with the optional Math version of Xviewer). Binary waveform data can be converted to CSV or Excel format and opened using a spreadsheet program.

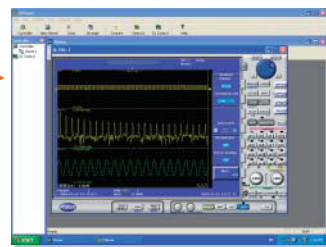
Additionally, Xviewer lets you transfer files between the DL series instruments and a PC, and gives you remote control of the instruments using your PC.

Xviewer also enables offline waveform display, computation, and analysis of data captured using Yokogawa's WE7000 series of PC-based measurement instruments.

<Main Window>

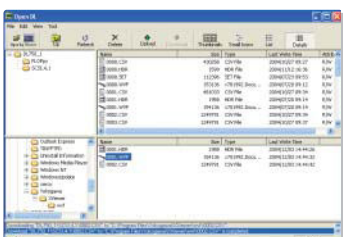


Remote Instrument Control



Viewer

File Transfer



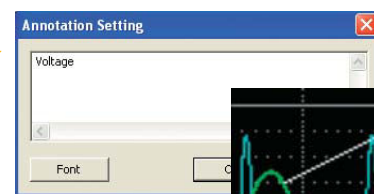
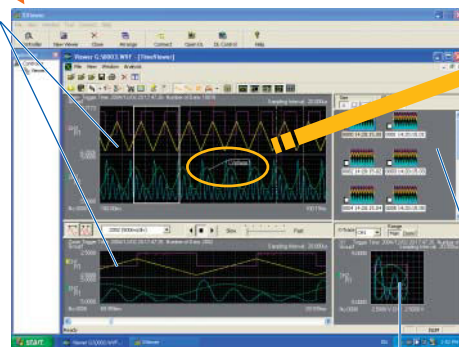
Xviewer supports Ethernet, USB and GP-IB interfaces, allowing you to control DL series* instruments using the PC on which Xviewer is installed. A virtual image of the screen and front panel of the DL that Xviewer is connected to is displayed on the PC. You can perform operations remotely by using your PC's mouse to "click" keys on the virtual screen as if you were pressing the actual keys on the DL.

You can perform file transfers between a DL series* instrument and the PC on which the software is installed, via Ethernet, USB or GP-IB. When you connect with the DL, Xviewer displays a list of files residing on the DL. You can select files from the list for download to the PC.

* : DL750/DL1600/DL1700E and DL7400 series only

Main & Zoom Displays

Xviewer's zoom function works in the same manner as that on the DL instruments; displaying the entire waveform and a zoomed subset of the waveform simultaneously. The waveform can be horizontally and vertically zoomed. Even large amounts of waveform data (up to 1 GW with the DL750 series) can be viewed quickly. The zoom window can be automatically scrolled (with variable direction and speed).



Annotation

Xviewer's zoom function works in the same manner as that on the DL instruments; displaying the entire waveform and a zoomed subset of the waveform simultaneously.

History Memory Display

Using the DL series instrument's history memory, you can arrange and display thumbnails of multiple acquired waveforms. The selected waveforms are expanded and displayed in the Main screen; multiple waveforms can also be superimposed.

X-Y Display

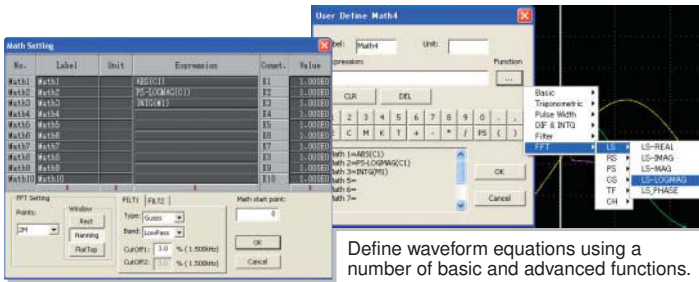
No.	Cursor1	Cursor2	Cursor Diff
2566	2566	6964	4398
Relative Time	- 49n	87n	86n
Trace	Value1	Value2	Value Diff
CH1[V]	-975.00m	-501.88m	473.33m
CH2[V]	2.2266	2.3900	163.33m
CH3[V]	-2.0854	-2.0888	2.0885m
CH4[V]	-2.0825	-278.33m	1.7581

Cursors

Using cursors, you can display the measured values at the points where the cursors intersect the waveform. There are three types of cursors available: horizontal, vertical, and X-Y. If two cursors are displayed, the difference between them can be calculated and displayed.

Waveform Computation (available only with the Math Edition)

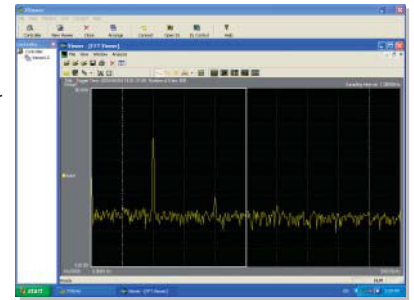
Up to ten math waveforms based on the displayed waveform data can be calculated and displayed. In addition to simple addition, subtraction, multiplication, and division, user-defined equations can be created using a large number of functions including: trigonometry, differentiation/integration, pulse width computation, and six types of FFT calculations. FFT analysis using up to 2M data points can be performed, and a wide variety of functions are available for frequency domain calculations such as power spectrum and transfer functions (amplitude and phase). Digital filtering (low pass, high pass, band pass) calculations for noise rejection and other applications are also included.



Define waveform equations using a number of basic and advanced functions.

FFT Display

Frequency domain waveforms are displayed in a dedicated FFT viewer window.



Automated Waveform Parameter Measurements

Parameters (characteristics) of the displayed waveforms can be automatically calculated and displayed. Up to twenty-six parameters can be selected. Calculation of the selected parameters is performed automatically and the measured results are displayed in a list (as shown on the right). The results of these calculations can be saved in a CSV file.

No.	Time	Cursor1	Cursor2	Cursor Diff
Time	100	100	100	0
Period	100	100	100	0
Peak to peak voltage	10.000V	10.000V	10.000V	0.000V
Peak to peak	10.000V	10.000V	10.000V	0.000V
Maximum	10.000V	10.000V	10.000V	0.000V
Minimum	-10.000V	-10.000V	-10.000V	0.000V
High level	10.000V	10.000V	10.000V	0.000V
Low level	-10.000V	-10.000V	-10.000V	0.000V
Average	0.000V	0.000V	0.000V	0.000V
Effective	7.071V	7.071V	7.071V	0.000V
RMS	7.071V	7.071V	7.071V	0.000V
Standard deviation	7.071V	7.071V	7.071V	0.000V
Bandwidth	1.000Hz	1.000Hz	1.000Hz	0.000Hz
Interference	1.000Hz	1.000Hz	1.000Hz	0.000Hz
Edge time	100.000ns	100.000ns	100.000ns	0.000ns
Fall time	100.000ns	100.000ns	100.000ns	0.000ns
Rise time	100.000ns	100.000ns	100.000ns	0.000ns
Frequency	1.000Hz	1.000Hz	1.000Hz	0.000Hz
Period	1.000Hz	1.000Hz	1.000Hz	0.000Hz
Phase width	100.000%	100.000%	100.000%	0.000%
Minimum width	100.000%	100.000%	100.000%	0.000%
Duty	50.00%	50.00%	50.00%	0.00%
Pulse count	1	1	1	0
Start1	1.000Hz	1.000Hz	1.000Hz	0.000Hz
Start2	1.000Hz	1.000Hz	1.000Hz	0.000Hz
End	1.000Hz	1.000Hz	1.000Hz	0.000Hz

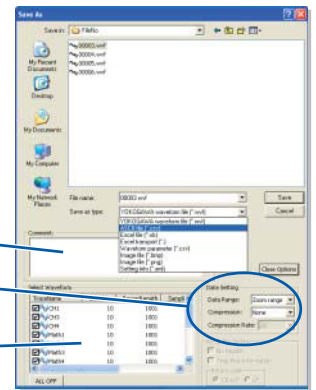
Data Conversion

Waveform data files in binary format (useful for data transfer because of their smaller size) can be converted to ASCII or Excel format and then opened using a spreadsheet program.

Comments can be added to files prior to saving (or conversion).

Select the data range and compression method for the file to be saved (or converted).

Select an individual channel or multiple channels to be saved (or converted).



Overview of Specifications

Compatible DL and WE Series Models:

DL1600, DL1700, DL1700E, DL7400, DL750 series and WE7000
Note: Online file transfer is not possible with the DL1700 and WE7000

Functions: Waveform Viewer
Communication settings(GP-IB,USB,Ethernet)
Online File Transfer*
Remote control of the DL series*
Data Conversion

* : Available only with DL750/DL1600/DL1700E and DL7400 series.

Specifications of Waveform Viewer

Supported File types:
Waveform data files in Binary format (.wvf & .wdf file name extensions)
Waveform data files in ASCII format (.csv file name extension)

Max. Number of displayed waveforms:
90/Group, Up to 10 Groups can be set

Display format: Main, Zoom, History, X-Y

Number of divided Windows:
Max. 16

Cursors: Vertical, Horizontal and X-Y

Annotation: Comments can be added in the Main, Zoom and X-Y windows

Automated Calculation of Waveform Parameters:
Max. 26 items such as P-P, Amp, RMS, Freq

Waveform Computation (available only with the Math Edition)

Max. Number of displayed waveforms (CHs):
10 waveforms (Math1 to Math 10)

Computation Accuracy (resolution):
Single floating point number

Operations: +, -, ×, /, Phase Shift
ABS, SQRT, LOG, EXP, NEG, SIN, COS, TAN, ATAN, PH, DIF, DDIF, INTG, IINTG, BIN, P2, P3, F1, F2, FV, PWHH, PWHL, PWLH, PWLL, PWXX, DUTYH,DUTYL, FILT1, FILT2, HLBT, MEAN, LS, RS, PS, PSD, CS, TF, CH
(See the following web site for detailed information of these operations. <http://www.yokogawa.com/tm/701992/>)

FFT Points: Max. 2M points
FFT Window: Rect, Hanning and Flat top
Digital Filter: Guass, Sharp, IIR
Max. Number of computed points:
10M per each Math channel

Waveform Data Conversion:
File(s) with an .wvf file name extension can be converted to ASCII (.csv) or Excel (.xls) format.
DL750 series realtime recording files with a .wdf file name extension can be converted to Binary (.wvf), ASCII (.csv) or Excel (.xls) format.

System Requirements

PC: Personal Computer(PC) with Pentium III(1GHz) or faster processor capable of running Windows 2000 (SP4 or later) or XP (SP1 or later), and at least 256 MB of RAM (512MB recommended)

Display: SVGA, or XGA monitor with at least 65536 colors

GP-IB board: National Instruments GP-IB board or PCMCIA card (required when using GP-IB data transfer and remote control)

*:A dedicated USB driver is required when using the USB interface. The USB driver can be downloaded from YOKOGAWA's web site.

You can download a trial version of Xviewer from YOKOGAWA's web site at: <http://www.yokogawa.com/tm/701992/>

Model & Suffix codes

Model	Suffix code	Description
701992	-SP01	Xviewer Standard Edition(1 license)
	-GP01	Xviewer Math Edition(1 license)

Microsoft Windows, Windows XP are registered trademarks of Microsoft Corporation, USA.

CAUTION



● Be sure to read the instruction manual for proper and safe use of the product.

YOKOGAWA ◆

YOKOGAWA ELECTRIC CORPORATION

Subject to change without notice.
[Ed : 01/b] Copyright ©2004
Printed in Japan, 412(KP)