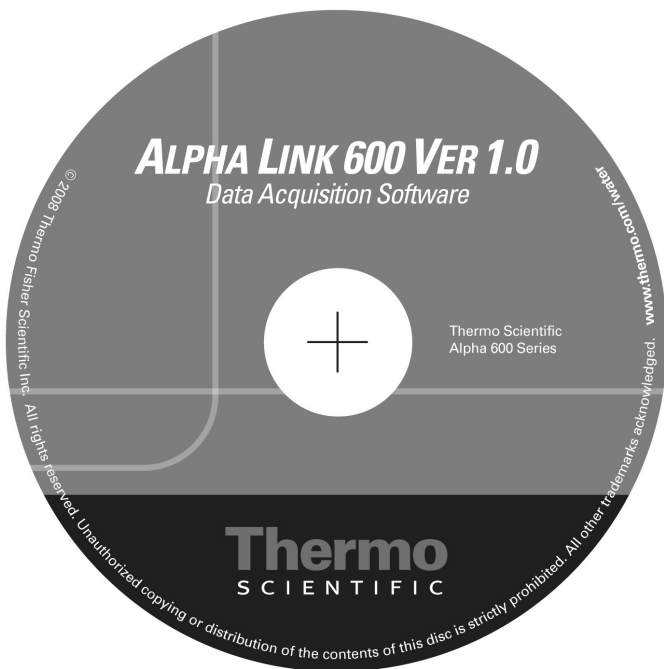


Instruction Manual

Alpha Link 600

Data Acquisition Software for Alpha 600 Series



ISO 9001
CERTIFIED

68X450202 | Rev.0 | Oct 2008

EUTECH
INSTRUMENTS
Technology Made Easy...

Preface

This manual serves to explain the use of the **Alpha 600 Link Data Acquisition Software (DAS)**. The manual functions in two ways, firstly as a step-by-step guide to help the user work with software application. Secondly, it serves as a handy reference guide. It assumes that the user is familiar with setting up, calibrating & measuring with the Alpha 600 series RF Transmitters. If there are doubts in the use of this software, please do not hesitate to contact the nearest Authorized Distributor.

The information presented in this manual is subject to change without notice as improvements are made, and does not represent a commitment on the part of Thermo Scientific.

Thermo Scientific cannot accept any responsibility for damage or malfunction of the unit due to improper use of the instrument.

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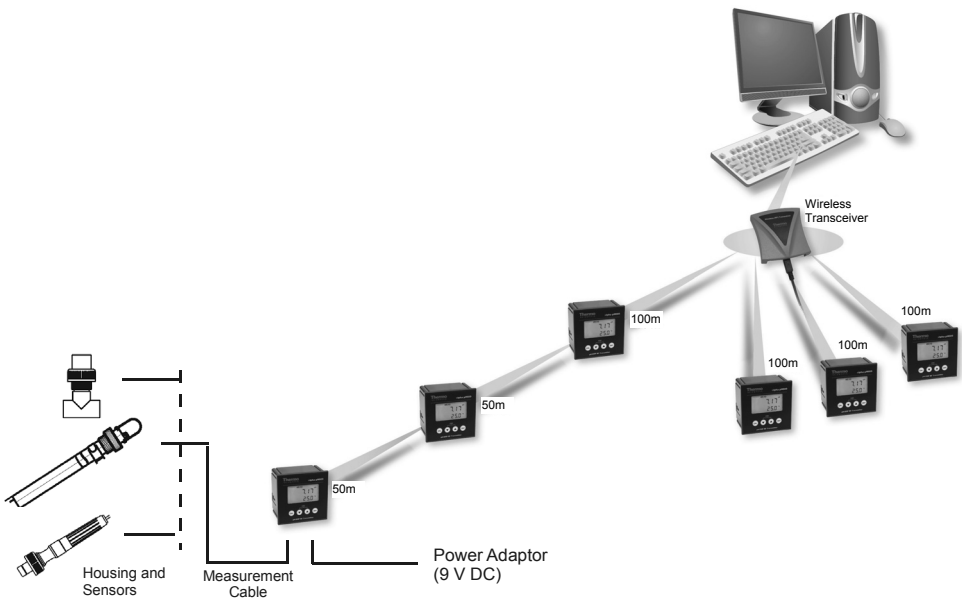
1 GETTING STARTED

1.1 Overview

Alpha Link 600 is a Windows® based add-on application software to the Alpha 600 Transmitter series. This software allows you to monitor water quality parameters at up to 10 locations from the comfort of your desktop, round the clock and uninterrupted, so you can detect and react to malfunctions faster.

Key features of CyberComm:

- 24/7 real-time data transfer from up to 10 meters, wirelessly and simultaneously, to your computer
- Data-logging with time, date, temperature and locations
- Allows report generation of logged data in the form of raw information, pie-chart and run-chart format
- Logs down each time a reading falls outside set range for future system troubleshooting and analysis



1.2 Installing the Alpha Link 600

System Requirements:

- Microsoft® Windows 2000, XP or Vista
- 1024 x 768 minimum screen resolution. A resolution of 1280 x 1024 is recommended.
- Recommended system memory 500 MB
- USB communication port

To install the Alpha Link 600 Program:

Note

Administrator rights are required to install this programme in your computer.

1. Insert the Alpha Link 600 installation CD into the CDROM drive of your PC. The installation wizard should start running automatically (Figure 1).

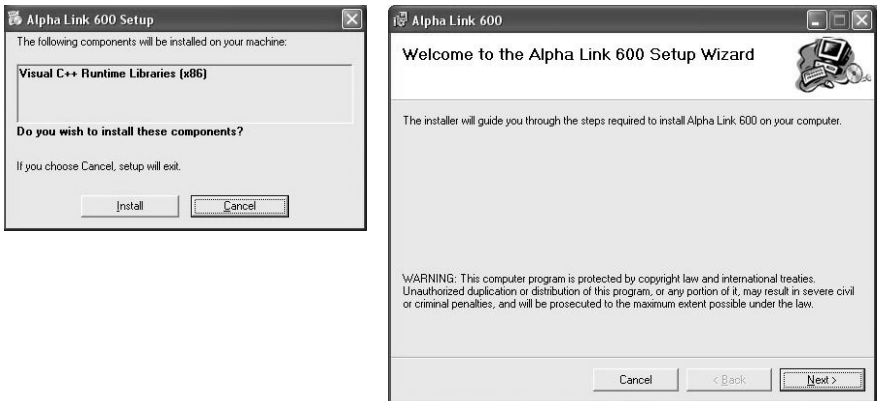


Figure 1: Preparing to install

2. Click **Install**, followed by **Next** to continue.

3. The next screen (Figure 2) gives you the option of entering your name & your organization's name, or leaving them blank. Click **Next** to continue.

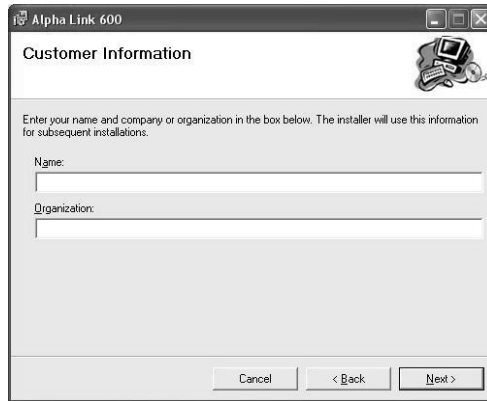


Figure 2 : Customer information

4. By default, the program will be installed in the following directory: '*C:/Program Files/Thermo /Alpha Link 600*'. Click "**Next**" to begin installing the program in this folder. Click "**Cancel**" to stop installing and exit the installation wizard (Figure 3).

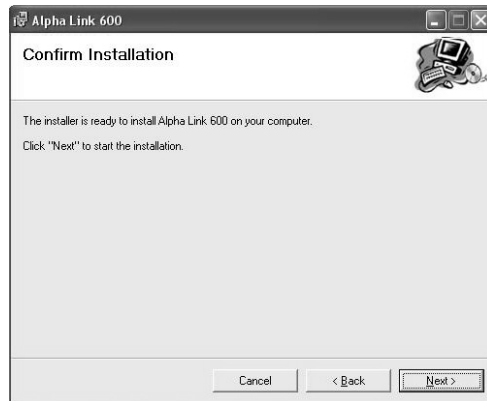


Figure 3 : Confirm installation

5. The following screen is displayed upon successful installation of the program (Figure 4). Click **Close** to exit the wizard. **Do not remove the installation CD from your CDROM drive.**

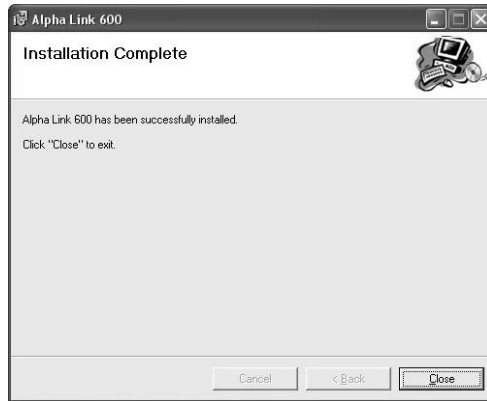


Figure 4 : Installation completed

6. Connect the transceiver to your computer. The **Found New Hardware Wizard** launches automatically upon detecting the transceiver to prompt for USB driver installation. This is a one-time installation. Select "Yes, this time only", then click "**Next**" to proceed. (Figure 5).



Figure 5 : Found New Hardware Wizard

7. The next screen prompts you to point the Wizard to the location of the USB driver. This driver can be located in the Alpha Link 600 installation CD. Select “Install from a list or specific location” (Figure 6). Click “**Next**” to proceed.

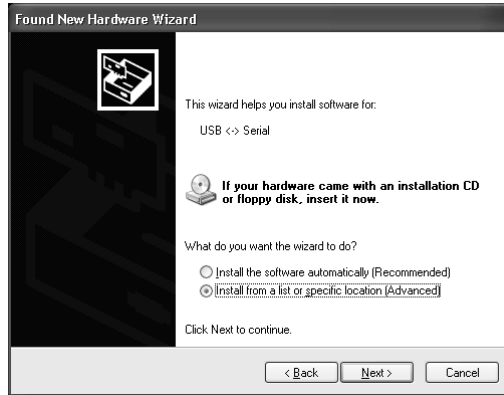


Figure 6 : Select “Install from a list or specific location”

8. Select “Search for the best driver in these locations”, follow by “Include this location in the search” to narrow the search locations. Click “**Browse**” and select the folder “**USB Driver**” in the CD (Figure 7). Click “**Next**” to proceed.



Figure 7 : Select “USB Driver” from the Alpha Link 600 Installation CD

9. The Wizard proceeds to search and install the USB driver (Figure 8).

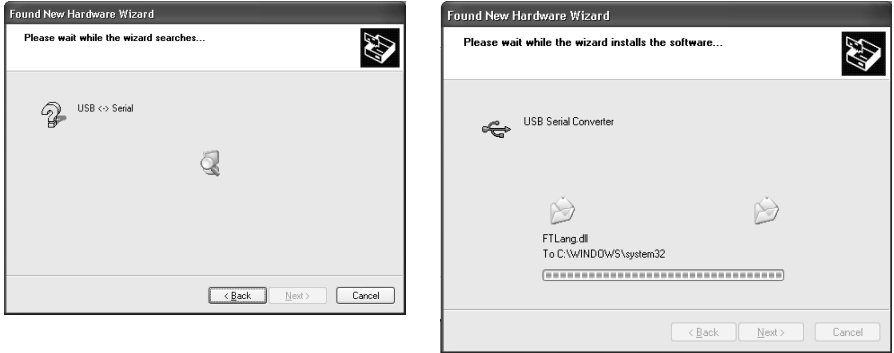


Figure 8 : The Wizard proceeds to search and install the USB driver

10. The following screens are displayed upon successful installation of the USB driver (Figure 9). Click **Finish** to exit the wizard.



Figure 9 : Installation complete

11. Locate the “**Alpha Link 600**” shortcut icon on your Desktop. Launch the Alpha Link 600 program by double-clicking on the icon. Your Alpha Link 600 is now ready to communicate with your Alpha 600 series transmitters.



Note

To locate the program if the shortcut icon does not appear on your desktop, go to: C:\Program Files\Thermo Fisher Scientific\Alpha Link 600\Thermo Fisher Scientific



1.3 Connecting the Alpha 600 Transmitters to the Alpha Link 600 Program

1.3.1 Instrument ID

Each Alpha 600 transmitter carries a unique instrument ID. This instrument ID is the same as the serial number of the instrument, and must be registered on the Alpha Link 600 for the program to start transmitting and reading data from the transmitter. The instrument ID of each transmitter is factory-assigned and cannot be changed or re-assigned by the user. This is important in maintaining communication between the transmitter and the host PC, and in ensuring data integrity of various instrument transmitting at same time.

The transceiver is designed to ignore all other transmission signals except for those that are from the registered transmitters, even if there are other transmitters within the transceiver range. To check if your transmitter is registered on the software, select **Instrument ID > View Registered Instrument** from the main menu. This will show you a list of transmitters registered on the program.

1.3.2 Registering Your Alpha 600 Transmitter

Each transceiver allows you to register up to 10 transmitters. The registration information is stored within the transceiver, so the transceiver continues to detect the registered transmitters no matter which computer the transceiver is connected to. To register your Alpha 600 Transmitter on the Alpha Link 600 program:

1. Select **Instrument ID > Register New Instrument** from the main menu.
2. Locate the six-digit numeric instrument ID at the bottom of your Alpha 600 Transmitter
3. Type the instrument ID in the dialog box (Figure 10) and select **OK**.

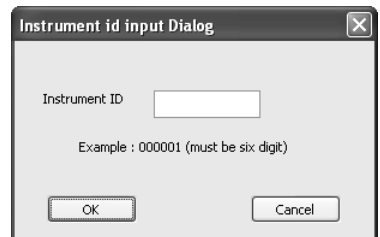


Figure 10 : Instrument ID Dialog

Note

The Alpha Link 600 will only be able to read transmitted data from your Alpha 600 transmitters after successful installation of the USB driver.

2 CUSTOMIZING YOUR PANEL VIEWS

2.1 The Alpha Link 600 Interface

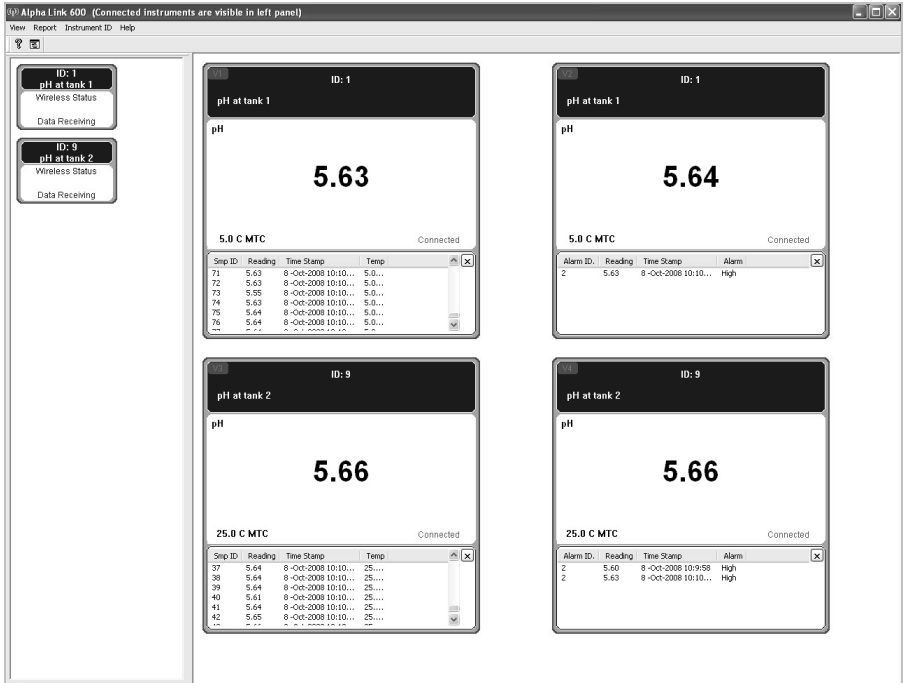


Figure 11 : Alpha Link 600 Interface

The Alpha Link 600 has two main view panels: The Reading View Panel (Main Panel), and the Instruments View Panel (Left Panel).

2.2 The Reading View Panel (Main Panel)

The main panel of Alpha Link 600 comes with four view windows, V1, V2, V3 and V4 (Figure 12), allowing you to monitor 4 transmitters simultaneously, or one transmitter in three different views.

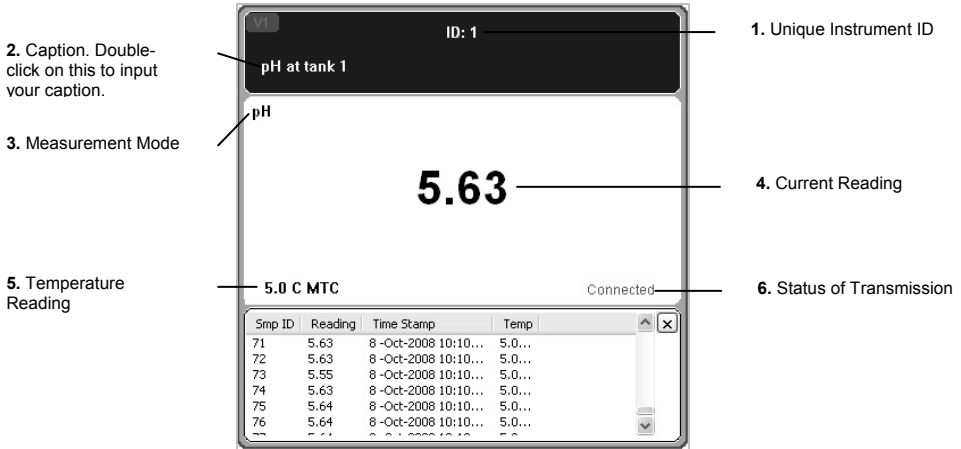
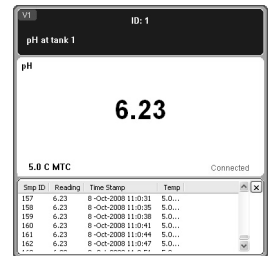


Figure 12 : View Window

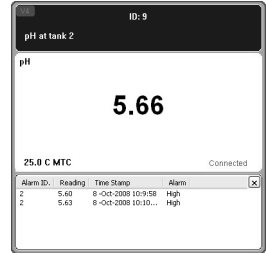
1. Data Reading View

Parameter, current reading, temperature reading and ATC/MTC setting.



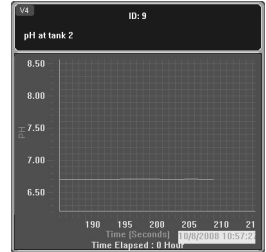
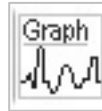
2. Alarm Logging View

Log of alarms when measurements fall below or exceed set limits.



3. Graph View

Line graph to exhibit measurement trend over time.



To select the view you want:

1. Click on a view window. A pop-up menu will appear (Figure 13).
2. Select "Data", "Alarm" or "Graph" according to the view you want.

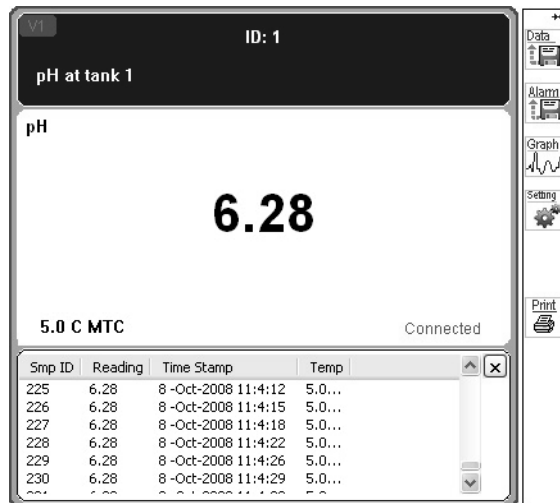


Figure 13 : View Window Pop-Up Menu

2.3 The Instrument View Panel (Left Panel)

The Instrument View Panel on the left of the screen displays all connected transmitters within range, each represented by their unique ID number. A pop-up menu appears when you click on a transmitter icon (Figure 14).

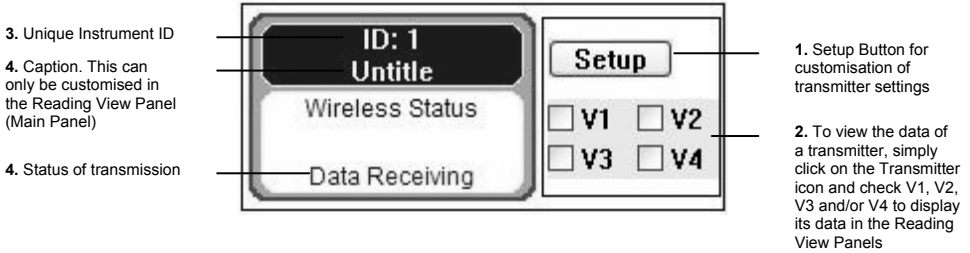


Figure 14 : Transmitter icon in the Instrument View Panel

Setup Button

The set-up button allows you to customise the data logging, high/low limit alarm and graphical logging set up for each transmitter.

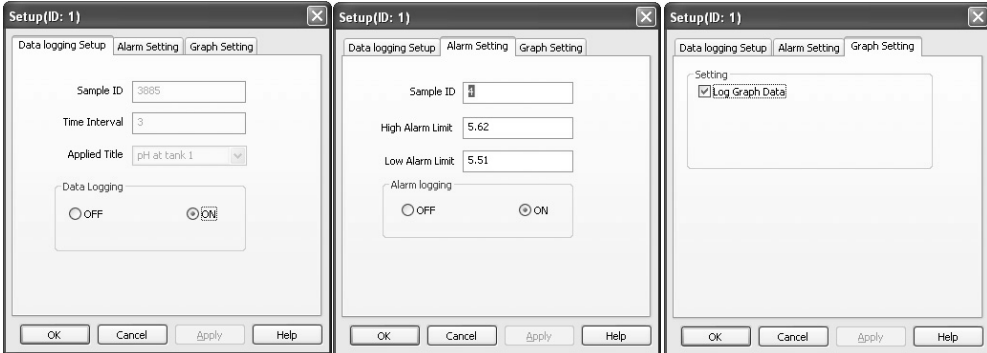


Figure 15 : Set-up Menu

3 VIEWING & GENERATING REPORTS

3.1 Viewing Reports

The Alpha Link 600 saves and presents data according to user-assigned captions under each meter.

To view report:

1. Select **Report > View Report** in the main menu. A dialog window will appear (Figure 16)
2. Select the Instrument ID in the drop down box
3. Select the Measurement Mode.
4. Once the Instrument ID and Measurement Mode have been selected, a list of available reports will appear. Double-click on a report to view it.

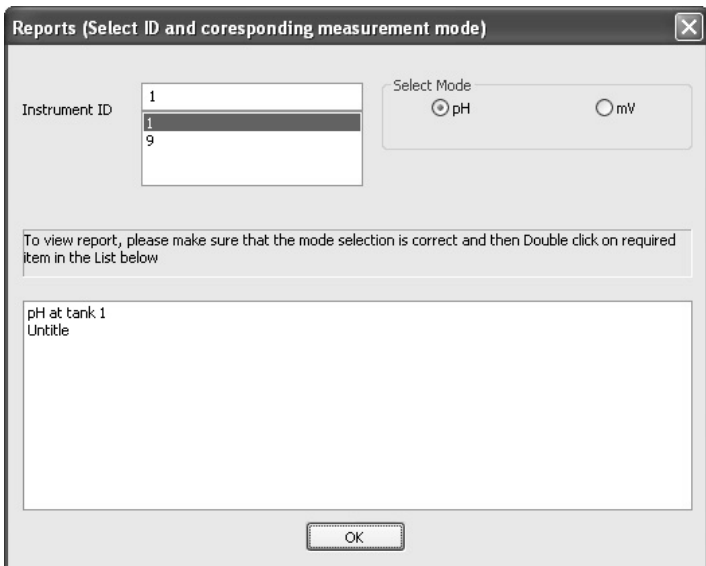


Figure 16 : Select Report

5. A report dialog window will appear, giving you four format options to view your data.

3.2 Report Formats

Users can choose to view data reports in four different formats:

3.2.1 Raw Data

Measurements with date, time and temperature.

Smp ID	Reading	Time Stamp	Temp
1	5.54	8-Oct-2008 10:6:38	5.0 C...
2	5.54	8-Oct-2008 10:6:42	5.0 C...
3	5.54	8-Oct-2008 10:6:45	5.0 C...
4	5.54	8-Oct-2008 10:6:48	5.0 C...
5	5.55	8-Oct-2008 10:6:51	5.0 C...
6	5.55	8-Oct-2008 10:6:55	5.0 C...
7	5.55	8-Oct-2008 10:6:58	5.0 C...
8	5.55	8-Oct-2008 10:7:1	5.0 C...
9	5.55	8-Oct-2008 10:7:4	5.0 C...
10	5.53	8-Oct-2008 10:7:8	5.0 C...
11	5.57	8-Oct-2008 10:7:12	5.0 C...
12	5.56	8-Oct-2008 10:7:15	5.0 C...
13	5.56	8-Oct-2008 10:7:18	5.0 C...
14	5.56	8-Oct-2008 10:7:21	5.0 C...
15	5.57	8-Oct-2008 10:7:25	5.0 C...
16	5.57	8-Oct-2008 10:7:28	5.0 C...
17	5.57	8-Oct-2008 10:7:32	5.0 C...
18	5.57	8-Oct-2008 10:7:35	5.0 C...
19	5.57	8-Oct-2008 10:7:38	5.0 C...
20	5.57	8-Oct-2008 10:7:41	5.0 C...
21	5.59	8-Oct-2008 10:7:45	5.0 C...
22	5.59	8-Oct-2008 10:7:48	5.0 C...
23	5.59	8-Oct-2008 10:7:51	5.0 C...
24	5.57	8-Oct-2008 10:7:54	5.0 C...
25	5.57	8-Oct-2008 10:7:58	5.0 C...
26	5.55	8-Oct-2008 10:8:1	5.0 C...
27	5.53	8-Oct-2008 10:8:4	5.0 C...
28	5.55	8-Oct-2008 10:8:7	5.0 C...

Figure 17 : Raw Data Report

3.2.2 Alarm Log

Log of measurements which fell outside set limits.

No.	Value	Time Stamp	Alarm
2	5.63	8-Oct-2008 10:10:17	HIGH
2	6.21	8-Oct-2008 10:57:8	HIGH
3	6.72	8-Oct-2008 11:50:23	HIGH
4	7.23	8-Oct-2008 13:28:28	HIGH

Figure 18 : Alarm Log

3.2.3 Graph Report

Data displayed in line graph format to show fluctuation patterns. Hover mouse over a node to see the measurement value, time and date of the data.

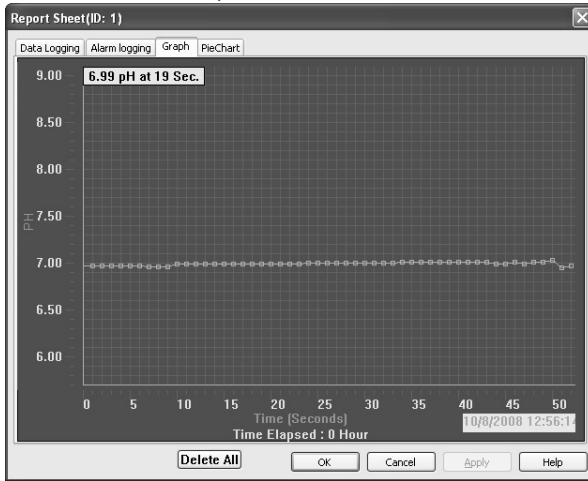


Figure 19 : Graph Report

3.2.4 Pie Chart Report

Data displayed in pie-chart format to show percentage of readings in each range, up to 0.1 intervals.

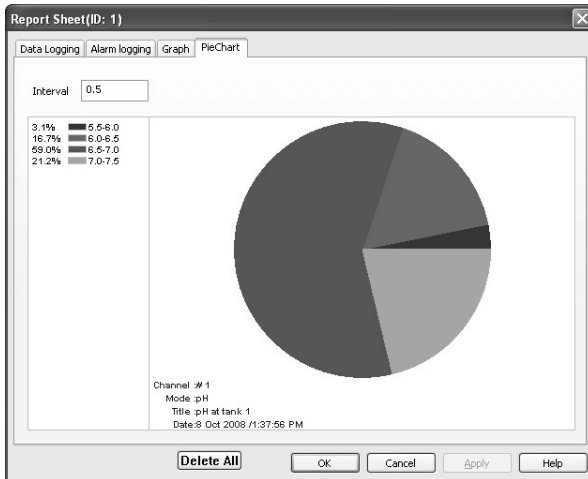


Figure 20 : Pie Chart Report

4 ORDER INFORMATION

4.1 Thermo Scientific Instruments

pH Monitor Replacement and Accessories

Item Description	Order Code
Alpha pH 600 wall-mount pH/ORP RF transmitter	TSPHCTP0600
Wireless (RF) receiver with application software	TSRCV0600S
Ryton®-body pH combi electrode with Pt100 RTD (ATC) & 20 m cable with BNC & PMP	EC100GTSO20B
Ryton®-body pH combi electrode with Pt100 RTD (ATC) & 10 m cable with BNC & PMP	EC100GTSO10B
Ryton®-body pH combi electrode with Pt100 RTD (ATC) & 5 m cable with BNC & PMP	EC100GTSO05B
Ryton®-body pH combi electrode with 5 m cable with BNC & connector for PMP (no ATC)	ECARGTSO05B
Ryton®-body pH combi electrode with 5 m cable with BNC connector (no ATC); measures up to 110 °C	ECARHTTSO05B
Ryton®-body pH combi electrode without ATC & 5 m cable with BNC connector. HF resistant glass	ECARTSOHF05B
Ryton®-body pH combi electrode with 5 m cable with BNC connector (no ATC)	ECARTSO05B
Ryton®-body ORP gold electrode with 5 m cable with BNC & PMP (no ATC)	ECHTAUTSO05B
Ryton®-body ORP platinum electrode with 5 m cable with BNC & PMP (no ATC)	ECHTPPTSO05B

Calibration Solutions

Item Description	Order Code
pH 4.01 buffer solution, 480 ml bottle	EC-BU-4BT
pH 7.00 buffer solution, 480 ml bottle	EC-BU-7BT
pH 10.01 buffer solution, 480 ml bottle	EC-BU-10BT
pH 4.01 buffer sachets, 20 ml x 20 pcs.	EC-BU-4BS
pH 7.00 buffer sachets, 20 ml x 20 pcs.	EC-BU-7BS
pH 10.01 buffer sachets, 20 ml x 20 pcs.	EC-BU-10BS
pH De-ionized water rinse sachets, 20 ml x 20 pcs	EC-RIN-WT
pH sachet assortment pack – 5 each of pH 4.01, pH 7.00, pH 10.01 and de-ionized water sachets per box	EC-AST-PK
Protein cleaning solution for pH electrode	EC-DPC-BT
Storage solution for pH electrode	EC-RE-005

- NOTE:**
- pH buffer solutions (480 ml bottle) have ± 0.01 pH accuracy at 25 °C
 - pH buffer sachets are individually sealed, single use pouch containing 20 ml of fresh, contamination free calibration solution
 - pH buffer sachets have ± 0.01 pH accuracy at 25°C

4.2 Eutech Instruments

pH Monitor Replacement and Accessories

Item Description	Order Code
Alpha pH 600 transmitter	56706-00
Wireless RF receiver with application software	56706-50
pH/Temp electrode with PMPO and 10-ft cable	35807-20
Platinum ORP electrode with 10-ft cable	35801-21
BNC to spade lug adapter	05994-90

Calibration Solutions

Item Description	Order Code
pH 4.01 calibration buffer, 500 ml	00654-00
pH 7.01 calibration buffer, 500 ml	00654-04
pH 10.01 calibration buffer, 500 ml	00654-08
pH 4.01 calibration buffer solution pouches, 20/box	35653-01
pH 7.00 calibration buffer solution pouches, 20/box	35653-02
pH 10.00 calibration buffer solution pouches, 20/box	35653-03
pH De-ionized water rinse sachets, 20 ml x 20 pcs	35653-00
Assortment pack – 5 each of pH 4.01, pH 7.00 and pH 10.00 solution pouches.	35653-04
Electrode cleaning solution	00653-06
Electrode storage solution	00653-04

NOTE: To order **Eutech** accessories, contact the nearest Oakton distributor

5 GENERAL INFORMATION

5.1 Warranty

This transmitter is supplied with a one-year warranty against significant deviations in material and workmanship from date of purchase and a six-month warranty for probe. Each instrument will have a warranty card with a specific serial number. The warranty card must be endorsed by the Authorized Distributor at the point of sale.

If repair or adjustment is necessary and has not been the result of abuse or misuse within the designated period, please return – freight pre-paid – and correction will be made without charge. Thermo Scientific/ Eutech will determine if the product problem is due to deviations or customer misuse.

Out of warranty products will be repaired on a charged basis.

Exclusions

The warranty on your instrument shall not apply to defects resulting from:

- Improper or inadequate maintenance by customer
- Unauthorized modification or misuse
- Operation outside of the environment specifications of the products

5.2 Return of Goods

Authorization must be obtained from our Customer Service Department or authorized distributor before returning items for any reason. A “Return Goods Authorization” (RGA) form is available through our authorized distributor. Please include data regarding the reason the items are to be returned. For your protection, items must be carefully packed to prevent damage in shipment and insured against possible damage or loss. Thermo Scientific will not be responsible for damage resulting from careless or insufficient packing. A restocking charge will be made on all unauthorized returns.

NOTE: Thermo Scientific reserves the right to make improvements in design, construction, and appearance of products without notice.

Thermo Scientific
Water Analysis Instruments

North America 166 Cummings Center
Beverly, MA 01915 USA
Toll Free: 1-800-225-1480
Tel: 1-978-232-6000
Dom. Fax: 1-978-232-6015
Int'l Fax: 978-232-6031
www.thermo.com/process

Europe Denmark House, Angel Drove
Ely, Cambridgeshire
CB7 4ET, UK
Tel: 44-1353-666111
Fax: 44-1353-666001

Asia Pacific Blk 55, Ayer Rajah Crescent,
#04-16/24 Singapore 139949
Tel: (65) 6778 6876
Fax: (65) 6773 0836
E-mail: eutech@thermofisher.com

Oakton Instruments

P.O Box 5136,
Vernon Hills, IL 60061, USA
Tel (in U.S.): 888-462-5866
Tel (outside U.S.): 1-847-549-7600
Fax: (1) 847-247-2984
E-mail: info@4oakton.com
Web-site: <http://www.4oakton.com>

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