



Manufacturer

TLV CO., LTD.

Kakogawa, Japan

is approved by LRQA Ltd. to ISO 9001/14001



Instruction Manual

EcoBrowser **Energy Monitoring System** **User Guide** (For System Users) Equivalent of Japanese Ver. 1.0

Introduction

Thank you for purchasing the energy monitoring system, EcoBrowser.

This user guide introduces how to use EcoBrowser according to your purpose.

Before using this product, please read the user guide carefully for proper use.

This user guide should be kept for future reference.

Contents

Introduction	1
1. Getting started/basic rules	2
1-1 Minimum hardware requirements.....	2
1-2 Logging in to EcoBrowser	3
2. Viewing the cost graph	4
3. Viewing usage	5
3-1 Viewing the live screen (usage in the last 30 minutes)	5
3-2 Viewing the top 15 energy users	6
4. Checking alerts.....	7
5. Frequently asked questions	8
5-1 I cannot login	8
5-2 Alert notifications not received	9
5-3 Sensor value cannot be obtained	9
5-4 An abnormal sensor value is obtained	9
5-5 Cost graph displays 0.....	9
5-6 Other inquiries	9
6. Product Warranty	10
7. Service	11

1. Getting started/basic rules

1-1 Minimum hardware requirements

This section describes the minimum computer requirements to use EcoBrowser.

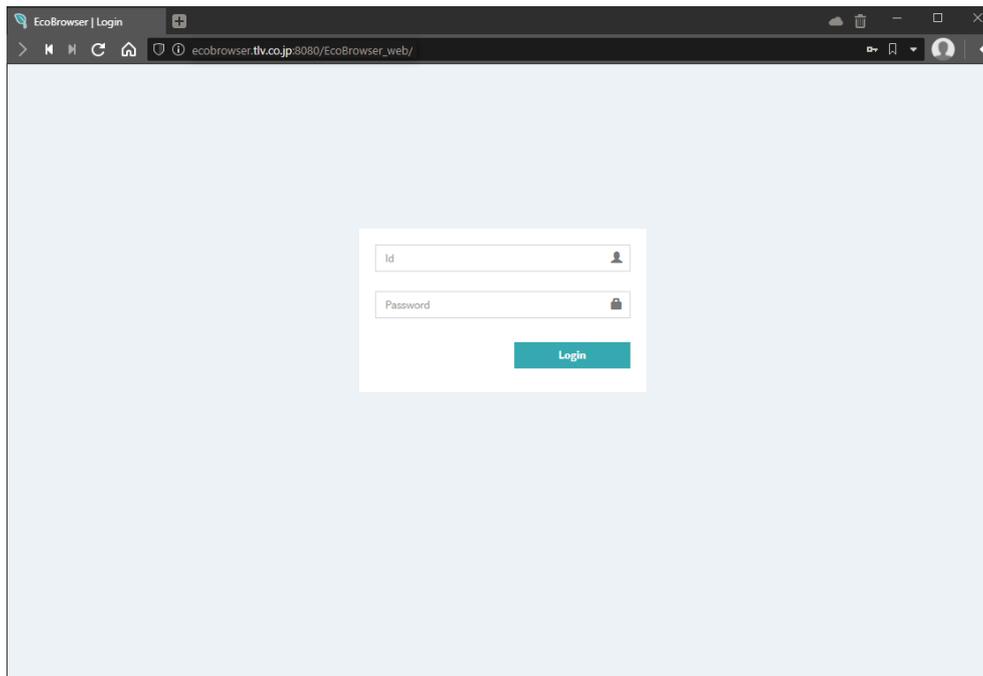
CPU	Intel Core 2 Duo or more
Memory (RAM)	512 MB or more
HD	10 GB or more
OS	Windows 8 or higher
Software	Browser: IE 11 or later, Edge 16 or later, Chrome 62 or later, Firefox 52 or later

1-2 Logging in to EcoBrowser

1. Enter the URL in the address bar of the browser and press the Enter key.
Note: Consult the system administrator for the URL.



2. Enter your ID and password, and then click on "Login"
Note: If you cannot login, refer to 5. Frequently asked questions for more information.



2. Viewing the cost graph

When you login to EcoBrowser, the cost graph is displayed as a top screen. If another tab is displayed, click the "EcoBrowser" logo (1.) to display the cost graph screen.

Graph types:

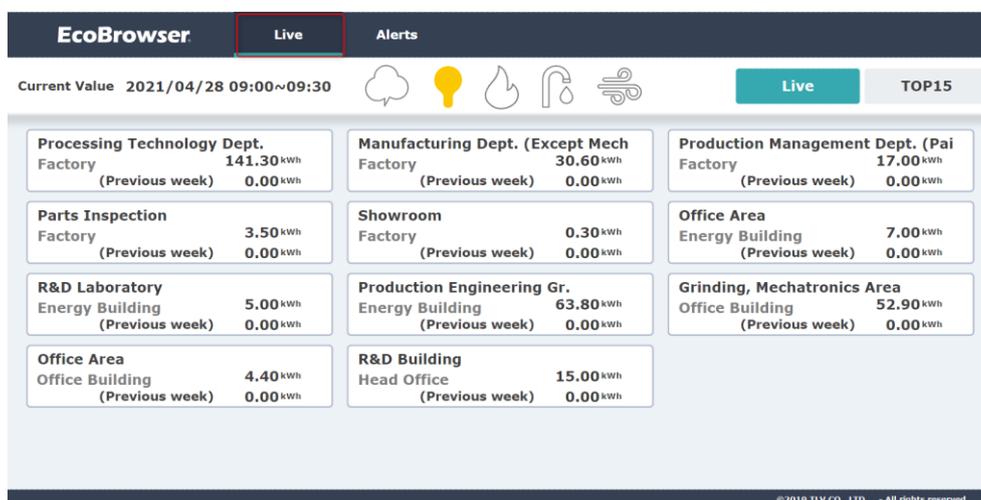
1. Cumulative basic unit
2. Energy consumption and production
3. Cumulative electricity rate
4. Cumulative fuel gas rate
5. Cumulative water rate



3. Viewing usage

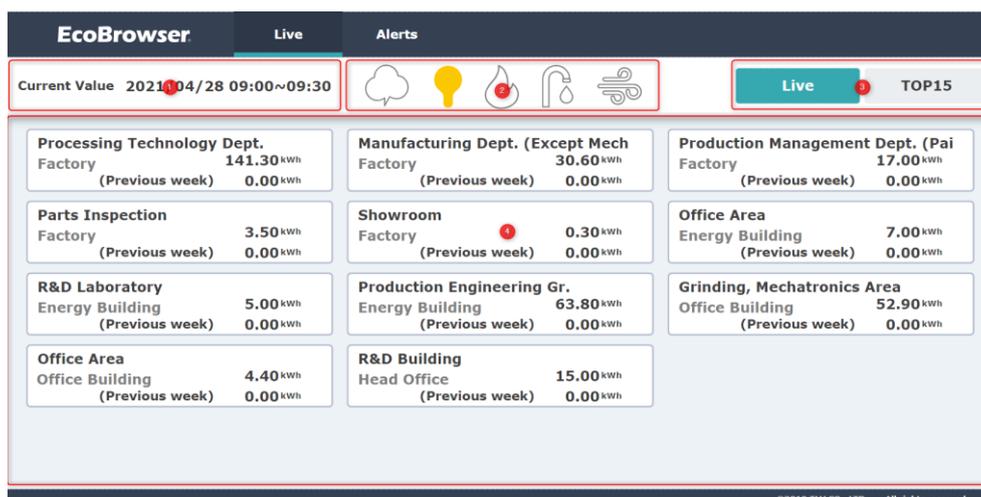
3-1 Viewing the live screen (usage in the last 30 minutes)

Click the "Live" tab to display the live screen.



Screen description:

1. Displays the time period for the data being viewed.
2. Click the icon for the energy type to switch the display. Icons indicate steam, electricity, fuel, water and air (left to right).
3. Switches between live and top 15 energy usage screen.
4. For each group specified at the time of the project meeting, such as department or building, you can see the total of the last 30 minutes of energy usage and the previous week of the same time period.



3-2 Viewing the top 15 energy users

Click the "TOP15" button to display the top 15 energy usage screen.

Production Areas			Non-production Areas		
Tag	%	kWh	Tag	%	kWh
KAK_EFX_0125 108_NC West Group1	18.5	55.0	KAK_EFX_0019 05_R&D Bldg. HVPT	48.4	15.0
KAK_EFX_0016 16_Factory Light	7.4	22.0	KAK_EFX_0048 10_Energy Bldg. 2F Office	22.6	7.0
KAK_EFX_0046 39_Compressor No.3	7.0	20.9	KAK_EFX_0043 09_Energy Bldg. Labo	16.1	5.0
KAK_EFX_0022 31_X Element, Clean Room, Others	5.8	17.1	KAK_EFX_0013 32_Office Bldg. System Dev. Room Light Board	10.3	3.2
KAK_EFX_0038 23_MAKINO. JUMBO	5.1	15.0	KAK_EFX_0110 103_System Dev. A/C 3	1.9	0.6
KAK_EFX_0044 37_Compressor No.1	5.0	14.9	KAK_EFX_0074 49_Office North A/C	0.3	0.1
KAK_EFX_0138 123_Painting(F-1LM-13 Main Trunk1)	4.4	13.0	KAK_EFX_0077 50_Reception Room A/C 23&24&25	0.3	0.1
KAK_EFX_0154 168_New Factory 2F West	4.4	13.0	KAK_EFX_0113 59_System Dev. A/C 2	0.0	0.0
KAK_EFX_0042 08_Energy Bldg. Pump	4.4	13.0	KAK_EFX_0049 03_Micro Cogeneration Power generation	0.0	0.0
KAK_EFX_0030 30_Office Bldg. J-1LM Utility	4.3	12.8	KAK_EFX_0075 48_Office South A/C	0.0	0.0
KAK_EFX_0050 Compressor No.5	3.8	11.2	KAK_EFX_0114 60_System Dev. A/C 1	0.0	0.0
KAK_EFX_0033 24_JS Pressing Cell	3.0	8.9	KAK_EFX_0112 58_GA A/C	0.0	0.0
KAK_EFX_0024 26_Amino Press	2.8	8.4			
KAK_EFX_0129 F-1LM-7 Sending	2.7	8.0			
KAK_EFX_0032 21_NC East Group	2.3	6.8			

Screen description:

- The screen is divided into two sections; non-production areas are displayed on the left, production areas are displayed on the right. Tags of the top 15 energy users for the total period stated in the top left of the screen ("1." in 3-1 Viewing the live screen).

Note: Tag: Refers to an element that has a data value used in X-SCADA.

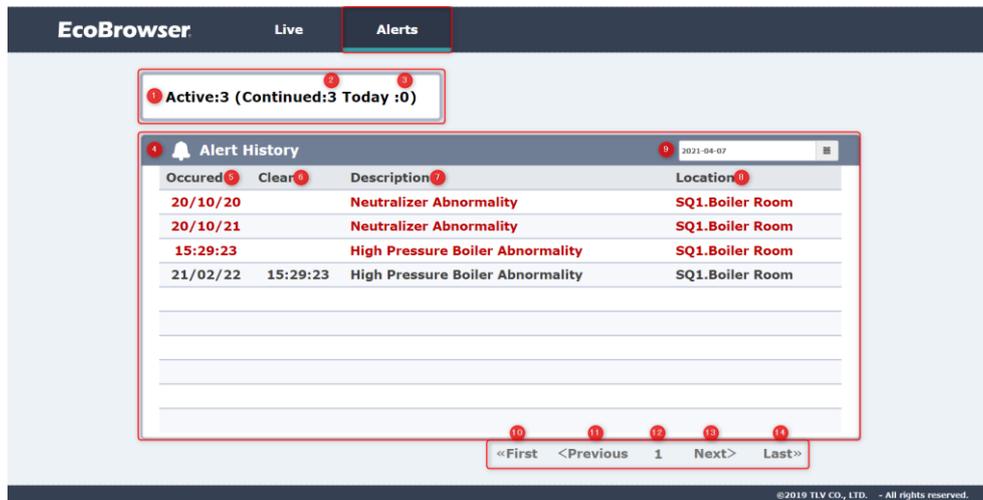
These include analog tags, digital tags, and text string tags.

- Click the icon of each energy to switch the display to top 15 energy users.
- Click the "Live" button to switch to the live screen.

Production Areas			Non-production Areas		
Tag	%	kWh	Tag	%	kWh
KAK_EFX_0125 108_NC West Group1	18.5	55.0	KAK_EFX_0019 05_R&D Bldg. HVPT	48.4	15.0
KAK_EFX_0016 16_Factory Light	7.4	22.0	KAK_EFX_0048 10_Energy Bldg. 2F Office	22.6	7.0
KAK_EFX_0046 39_Compressor No.3	7.0	20.9	KAK_EFX_0043 09_Energy Bldg. Labo	16.1	5.0
KAK_EFX_0022 31_X Element, Clean Room, Others	5.8	17.1	KAK_EFX_0013 32_Office Bldg. System Dev. Room Light Board	10.3	3.2
KAK_EFX_0038 23_MAKINO. JUMBO	5.1	15.0	KAK_EFX_0110 103_System Dev. A/C 3	1.9	0.6
KAK_EFX_0044 37_Compressor No.1	5.0	14.9	KAK_EFX_0074 49_Office North A/C	0.3	0.1
KAK_EFX_0138 123_Painting(F-1LM-13 Main Trunk1)	4.4	13.0	KAK_EFX_0077 50_Reception Room A/C 23&24&25	0.3	0.1
KAK_EFX_0154 168_New Factory 2F West	4.4	13.0	KAK_EFX_0113 59_System Dev. A/C 2	0.0	0.0
KAK_EFX_0042 08_Energy Bldg. Pump	4.4	13.0	KAK_EFX_0049 03_Micro Cogeneration Power generation	0.0	0.0
KAK_EFX_0030 30_Office Bldg. J-1LM Utility	4.3	12.8	KAK_EFX_0075 48_Office South A/C	0.0	0.0
KAK_EFX_0050 Compressor No.5	3.8	11.2	KAK_EFX_0114 60_System Dev. A/C 1	0.0	0.0
KAK_EFX_0033 24_JS Pressing Cell	3.0	8.9	KAK_EFX_0112 58_GA A/C	0.0	0.0
KAK_EFX_0024 26_Amino Press	2.8	8.4			
KAK_EFX_0129 F-1LM-7 Sending	2.7	8.0			
KAK_EFX_0032 21_NC East Group	2.3	6.8			

4. Checking alerts

Click the "Alerts" tab to display the alert screen.



Screen description:

1. The number of alerts currently occurring.
2. The number of alerts that occurred before yesterday and have not been cancelled.
3. The number of alerts that have occurred today and have not been cancelled.
4. The alert history is displayed in order of cancellation date and time. Ongoing alerts are shown in red and stay on top of the list until cancelled.
5. Time (year/month/day) when the alert occurred.
6. Time (year/month/day) when the alert cancelled.

Note: The display formats of alert occurrence and cancellation are as follows.

Time display: An alert that occurred (was cancelled) on the day displayed on the calendar.

Date display: An alert that occurred (was cancelled) on a day other than that displayed on the calendar. To view the time, select the day from the calendar in the upper right.

7. Alert name
8. Name of the PLC that detected the alert
9. Click the calendar icon  next to the date and select the date from the calendar to see detailed information (history) about the alert for the day.

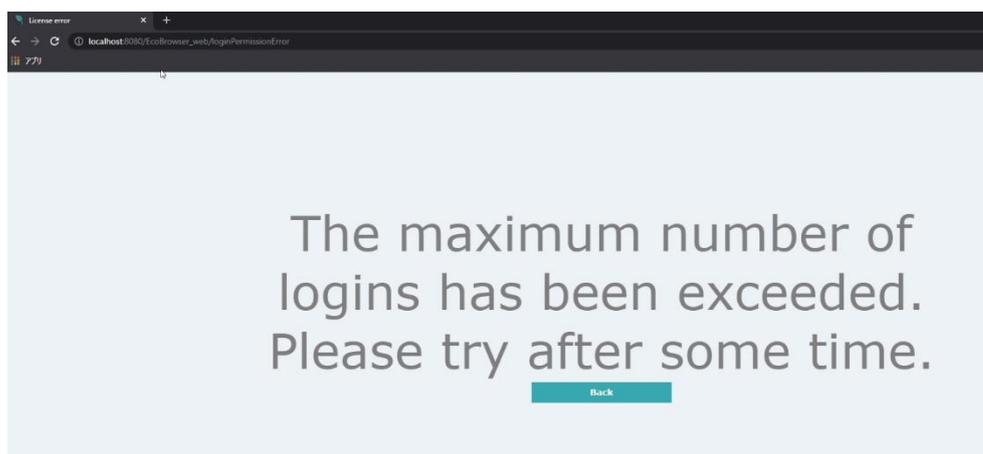
When 10 or more alerts are displayed, the following buttons will be enabled.
10. Click "<< Start" to move to the page with the most recently cancelled alerts.
11. Click the "<Previous" button to return to the previous page.
12. Page number of the screen currently displayed
13. Click the "Next>" button to move to the next page.
14. Click "End >>" to move to the page with the oldest cancelled alerts.

5. Frequently asked questions

5-1 I cannot login

If you are unable to log in, it may be due to the following issues. For other issues, consult user support.

1. The account has not been registered
Contact the system administrator and request user account registration.
2. I forgot my password
Consult the system administrator.
3. Incorrect ID/password entered
Confirm the login details and enter the correct ID and/or password.
 - Is caps lock turned on?
 - Are there any spaces before or after the ID/password?
4. The number of users that can be connected simultaneously has been exceeded
The number of users who can access at the same time depends on the number of licenses purchased. Contact the system administrator.
5. Error screen appears after entering ID/password.



You have already logged in with the same ID. Please wait a short time before trying to log in. (As a general rule, avoid using the same ID for multiple users.)

5-2 Alert notifications not received

If you are not receiving alert notifications via email, contact your system administrator and check the settings.

1. The account has not been registered
Contact your system administrator and request account registration.
2. Incorrect registered email address
Contact your system administrator and request to correct the account details.

5-3 Sensor value cannot be obtained

1. The sensor is faulty.
Make sure that the sensor is operating properly.
2. The obtained value is 0
The sensor is operating correctly and the value obtained may be 0.
3. The sensor cannot be registered to EcoBrowser.
When adding a sensor, it must be registered in the master data. Contact your system administrator and request master data registration.
4. IP address of the PLC has been changed
The IP address of the PLC must be static. Check the IP address settings (on the DHCP server and device).
5. PLC port is not open.
If the port is not open, communication with EcoBrowser is not possible. Make sure that the port is open.
6. PLC has not been restarted.
To reflect the new PLC settings, restart the PLC. Restart the PLC.

5-4 An abnormal sensor value is obtained

1. Incorrect PLC settings
Make sure the maximum value and digit grouping on the PLC are properly set.

5-5 Cost graph displays 0

1. In order to display the cost graph correctly, it is necessary to set the monthly cost unit price. Contact your system administrator and check the cost settings.

5-6 Other inquiries

Consult TLV for more inquiries.

TLV EcoBrowser user support

ecobrowser@tlv.com

6. Product Warranty

1. Warranty Period
One year following product delivery.
2. Warranty Coverage
TLV CO., LTD. warrants this product to the original purchaser to be free from defective materials and workmanship. Under this warranty, the product will be repaired or replaced at our option, without charge for parts or labor.
3. This product warranty will not apply to cosmetic defects, nor to any product whose exterior has been damaged or defaced; nor does it apply in the following cases:
 - 1) Malfunctions due to improper installation, use, handling, etc., by other than TLV CO., LTD. authorized service representatives.
 - 2) Malfunctions due to dirt, scale, rust, etc.
 - 3) Malfunctions due to improper disassembly and reassembly, or inadequate inspection and maintenance by other than TLV CO., LTD. authorized service representatives.
 - 4) Malfunctions due to disasters or forces of nature.
 - 5) Accidents or malfunctions due to any other cause beyond the control of TLV CO., LTD.
4. Under no circumstances will TLV CO., LTD. be liable for consequential economic loss damage or consequential damage to property.

7. Service

For Service or Technical Assistance: Contact your TLV representative or your regional TLV office.

In Europe:

TLV EURO ENGINEERING GmbH

Daimler-Benz-Straße 16-18, 74915 Waibstadt, Germany

Tel: [49]-(0)7263-9150-0
Fax: [49]-(0)7263-9150-80

TLV EURO ENGINEERING UK LTD.

Units 7 & 8, Furlong Business Park, Bishops Cleeve,
Gloucestershire GL52 8TW, U.K.

Tel: [44]-(0)1242-227223
Fax: [44]-(0)1242-223077

TLV EURO ENGINEERING FRANCE SARL

Parc d'Ariane 2, bât. C, 290 rue Ferdinand Perrier, 69800 Saint Priest,
France

Tel: 33-(0)4-72482222
Fax: [33]-(0)4-72482220

In North America:

TLV CORPORATION

13901 South Lakes Drive, Charlotte, NC 28273-6790, U.S.A.

Tel: [1]-704-597-9070
Fax: [1]-704-583-1610

In Mexico and Latin America:

TLV ENGINEERING S. A. DE C. V.

Av. Jesús del Monte 39-B-1001, Col. Hda. de las Palmas, Huixquilucan,
Edo. de México, 52763, Mexico

Tel: [52]-55-5359-7949
Fax: [52]-55-5359-7585

In Oceania:

TLV PTY LIMITED

Unit 8, 137-145 Rooks Road, Nunawading, Victoria 3131, Australia

Tel: [61]-(0)3-9873 5610
Fax: [61]-(0)3-9873 5010

In East Asia:

TLV PTE LTD

36 Kaki Bukit Place, #02-01/02, Singapore 416214

Tel: [65]-6747 4600
Fax: [65]-6742 0345

TLV SHANGHAI CO., LTD.

Room 5406, No. 103 Cao Bao Road, Shanghai, China 200233

Tel: [86]-(0)21-6482-8622
Fax: [86]-(0)21-6482-8623

TLV ENGINEERING SDN. BHD.

No.16, Jalan MJ14, Taman Industri Meranti Jaya, 47120 Puchong,
Selangor, Malaysia

Tel: [60]-3-8065-2928
Fax: [60]-3-8065-2923

TLV PRIVATE LIMITED

252/94 (K-L) 17th Floor, Muang Thai-Phatra Complex Tower B,
Rachadaphisek Road, Huaykwang, Bangkok 10310, Thailand

Tel: [66]-2-693-3799
Fax: [66]-2-693-3979

TLV INC.

#302-1 Bundang Technopark B, 723 Pangyo-ro, Bundang, Seongnam,
Gyeonggi, 13511, Korea

Tel: [82]-(0)31-726-2105
Fax: [82]-(0)31-726-2195

In the Middle East:

TLV ENGINEERING FZCO

Building 2W, No. M002, PO Box 371684, Dubai Airport Free Zone, Dubai, UAE

Email: sales-me@tlv.co.jp

In Other Countries:

TLV INTERNATIONAL, INC.

881 Nagasuna, Noguchi, Kakogawa, Hyogo 675-8511, Japan

Tel: [81]-(0)79-427-1818
Fax: [81]-(0)79-425-1167

Manufacturer:

TLV CO., LTD.

881 Nagasuna, Noguchi, Kakogawa, Hyogo 675-8511, Japan

Tel: [81]-(0)79-422-1122
Fax: [81]-(0)79-422-0112