

# File converter for EcoAdviser

User's Manual

 Before operating the instrument, you should first read thoroughly this operation manual for safe operation and optimized performance of the product.
 Deliver this user's manual to the end user.

### Introduction

Thank you for your patronage. We appreciate your purchase of Mitsubishi Electric Energy Saving Support Software EcoAdviser.

This manual explains the operation of File converter for EcoAdviser.

Please read this manual carefully to ensure correct use.

#### Disclaimer

- Be sure to read and understand "The Software end user license agreement" in the end of this manual when you use this software.
- Our company is not liable for customer for system failure due to the customer or the third party, for any legal issues, and for any loss resulting directly or indirectly from misusage or malfunction of this software.
- Our company is not liable for any difficulties (being file corrupted, trouble or malfunction of the computer and conversion file source, and their system failure) that occur when importing the conversion source file to the customer's computer.
- The screen images and operation procedures described in this manual may differ depending on an operating system in use and its version.
- This manual uses screen images of Energy Saving Data Analysis and Diagnosis Software (model: MES3-EAP1-AI) when explaining the EcoAdviser operating procedures.

#### Related materials

Material name	Ref. No.
Mitsubishi Electric Energy Saving Support Software	IB63E58
EcoAdviser	
Energy Saving Data Analysis Software	
Energy Saving Data Analysis and Diagnosis Software	
MODEL	
MES3-EAP1-DA	
MES3-EAP1-AI	
User's Manual	ID ( 2000
Logging Unit for Energy Measuring Unit	IB63780
MODEL EMU4-LM	
User's Manual (Details)	
Energy Measuring Unit MODBUS corresponding Data Acquisition	IB63G17
Software	1003017
MODEL	
EMU4-SW1	
User's Manual	
MELSEC iQ-R CPU Module	SH-081264ENG
User's Manual (Application)	
MELSEC iQ-R High Speed Data Logger Module	SH-081562ENG
User's Manual (Application)	
MELSEC iQ-F	JY997D55401
FX5 User's Manual (Application)	
QnUDVCPU/LCPU User's Manual	SH-080893ENG
(Data Logging Function)	
High Speed Data Logger Module User's Manual	SH-080818ENG

## Terms

Unless otherwise specified, this manual uses the following terms.

Term	Description
Logging file	A conversion source file.
Logging cycle	A data interval in logging file

## Generic terms and abbreviations

Unless otherwise specified, this manual uses the following generic terms and abbreviations.

Generic term/abbreviation	Description
Logging Unit	Logging Unit for Energy Measuring Unit (Model:EMU4-LM).
Data Acquisition Software	Energy Measuring Unit MODBUS corresponding Data Acquisition Software (Model:EMU4-SW1).
MELSEC	Programmable Controllers MELSEC.

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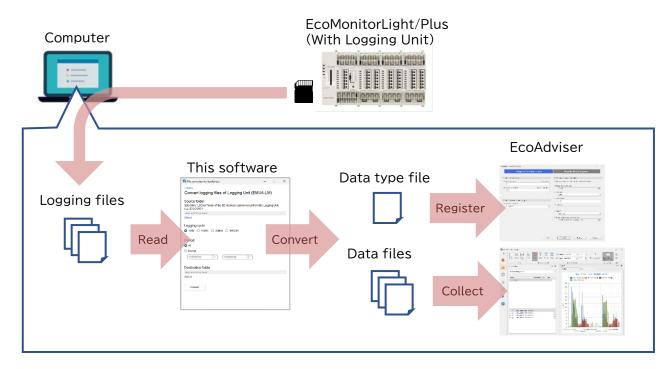
### 1 Overview

This software is a tool that converts logging files of Logging Unit, Data Acquisition Software or MELSEC into formats that can be collected by EcoAdviser.

Converted files can be manually collected with EcoAdviser and used for graphs and reports.

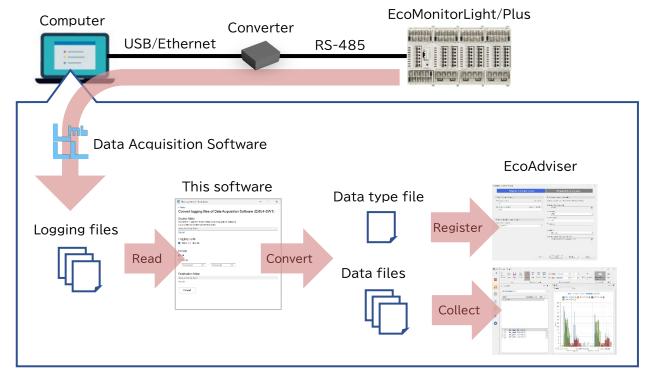
#### Impression:Logging Unit

The data logged by the Logging Unit is imported from the SD memory card to the computer, and this software converts it into a format that can be collected by EcoAdviser.



#### Impression: Data Acquisition Software

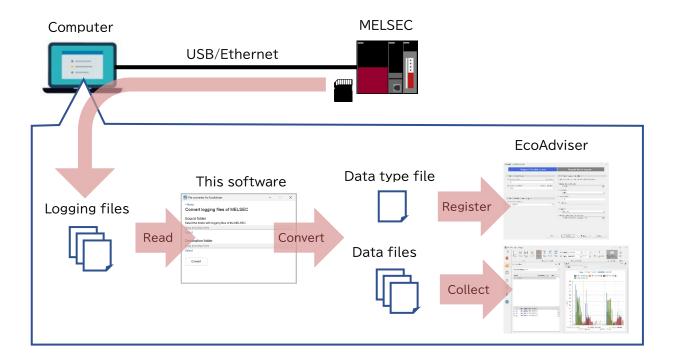
This software converts the data logged by the Data Acquisition Software into a format that can be collected by EcoAdviser.



#### Impression: MELSEC

The data logged by MELSEC is imported into a computer, and this software converts it into a format that can be collected by EcoAdviser.

✓ Please refer to the MELSEC user's manual for how to import the MELSEC logging file to your computer.



## 2 System configuration

## 2.1 Operating Environment

The operating environment of this software is as follows.

Item	Contents
Operating system	Microsoft Windows 11 Pro (64bit)
	Microsoft Windows 10 Pro (32bit/64bit)
.NET Framework	Microsoft .NET Framework 4.6.2

#### 2.2 Supported models / logging files

Supported models and logging files of this software are as follows.

Model	Logging cycle of Logging file	Availability in EcoA (•: Available -: L Data analysis function (Graph, Report)	
Logging Unit	1 Min. 15 Min. 30 Min. 1 Hour	— ●*1	_
Data Acquisition Software	1 Min. 1 Hour	●*2 ●	<b>•</b>
MELSEC	1 Min. or less Over 1 Min.	●*2 ●*2	●*3 -

<sup>\*1</sup> The data period setting of EcoAdviser and the logging cycle must match.

#### Supported MELSEC series / Logging files

Series	Logging files
MELSEC iQ-R Series	CSV file or Unicode text file logged by the data logging function of the CPU Module.
	CSV file or Unicode text file logged by the High Speed Data Logger Module.
MELSEC iQ-F Series	CSV file logged by the data logging function of the CPU Module.
MELSEC-L Series	CSV file logged by the data logging function of the CPU Module.
MELSEC-Q Series	CSV file logged by the data logging function of the CPU Module (QnUDVCPU).
	CSV file logged by the High Speed Data Logger Module.

### 2.3 Restrictions

Describes restrictions on logging files.

#### Restrictions: Logging Unit

The following restrictions apply to the logging file of the Logging Unit.

Item	Restriction	Remarks
Data time		If the same data time exist in one file, conversion is possible, but EcoAdviser cannot collect them.

<sup>\*2</sup> EcoAdviser extracts and collects according to the EcoAdviser data cycle setting.

<sup>\*3</sup> EcoAdviser extracts and collects at 1-minute intervals.

## **Restrictions: Data Acquisition Software**

The following restrictions apply to the logging file of the Data Acquisition Software.

Item	Restriction	Remarks
Data name	Maximum 30 letters	If the maximum number of letters is exceeded, conversion is possible, but EcoAdviser cannot register measuring point.
Data time	No duplication	If the same data time exist in one file, conversion is possible, but EcoAdviser cannot collect them.

#### Restrictions: MELSEC

The following restrictions apply to the logging file of the MELSEC.

Item	Restriction	Remarks
Number of records in one file	Maximum 36000 records	If the maximum number of records is exceeded, conversion is possible, but EcoAdviser cannot collect them.
Number of logging items in one file	Maximum 256 points	If the maximum number of points is exceeded, conversion is possible, but EcoAdviser cannot register measuring points.
File name	An 8-digit hexadecimal serial number is required before the extension	Files that do not have an 8-digit hexadecimal serial number before the extension will not be converted.
Data type	Only the following data types can be converted: BIT USHORT SHORT ULONG LONG FLOAT DOUBLE	Data types that cannot be converted are output without conversion. It cannot be registered as a measuring point in EcoAdviser.
Data name	Maximum 30 letters	If the maximum number of letters is exceeded, conversion is possible, but EcoAdviser cannot register measuring point.
	No duplication	If the same data name exist, conversion is possible, but EcoAdviser cannot collect them.
Data time	Data time column required	If there is no data time column, a conversion error will occur.
	No duplication	If the same data time exist in one file, conversion is possible, but EcoAdviser cannot collect them.
Header rows	File information row, data type information row, data name row required	If there is no file information row, data type information row, or data name row, a conversion error will occur.
Integrated value	Indicated value	Difference value may not be collected correctly by EcoAdviser.

## 3 Preparation before use

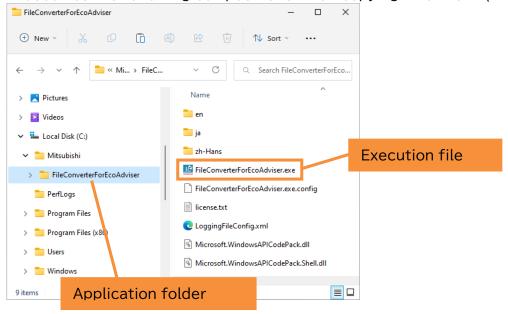
#### 3.1 Download

This software can be used by unzipping the downloaded compressed file and copying it to any location (C:\Mitsubishi folder, etc.).

The installation of this software is unnecessary.

#### Folder composition

It becomes the following compositions when copying it to the C:\Mitsubishi folder.



- ✓ Please do not copy it onto the program folder (C:\Program Files folder and C:\Program Files(x86) folder). There is a possibility of not operating normally.
- Do not rename or delete folders and files. It does not operate normally.
- ✓ Please delete copied application folder ("FileConverterForEcoAdviser" folder) when this software becomes unnecessary.

## 4 Basic operation

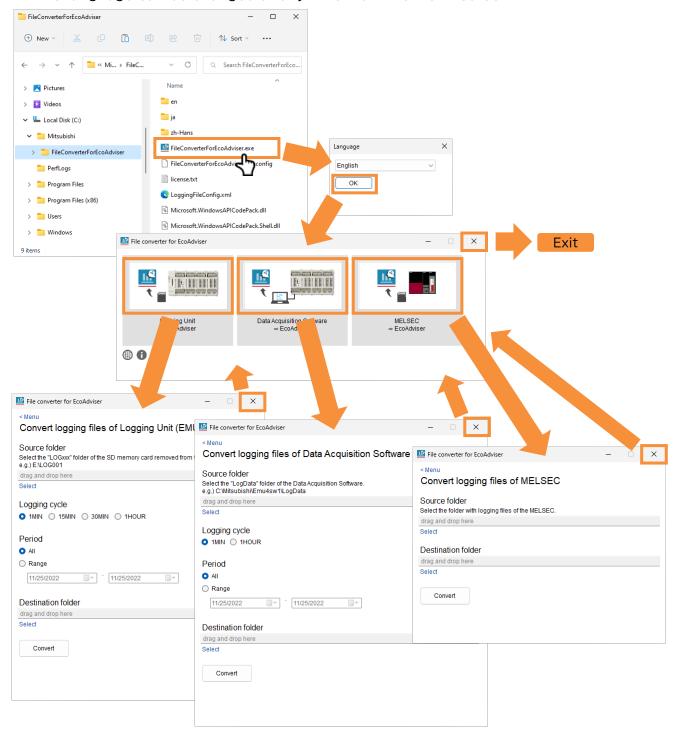
#### 4.1 Start and exit

#### First start

Double-click the execution file of this software (FileConverterForEcoAdviser.exe). Select the language at the first start.

To exit, click the [x] button on the menu screen.

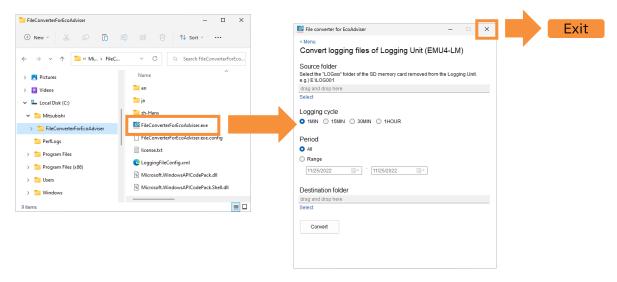
✓ The language can be changed at any time from the menu screen.



#### Second and subsequent start

When starting for the second time or later, the conversion screen displayed last time will be displayed so that you do not have to select from the menu screen each time. (If neither conversion screen has been displayed, the menu screen will be displayed.) To exit, click the [x] button on the conversion screen.

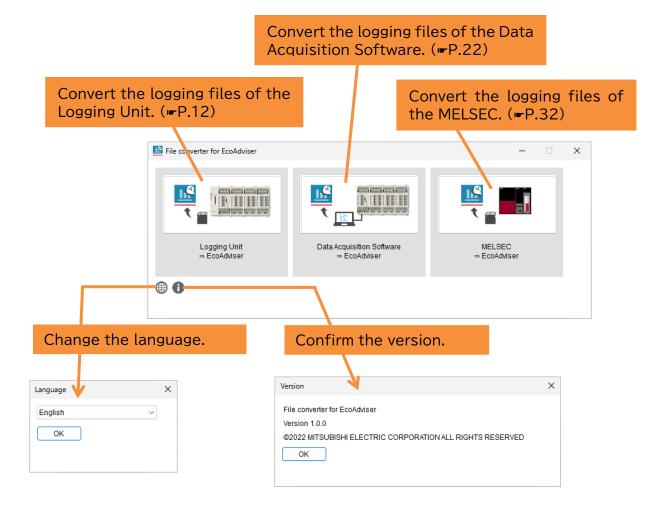
■e.g.) When the conversion screen for Logging Unit was displayed last time



- ✓ If you want to use other conversion functions, click [< Menu] at the top of the screen to return to the menu screen and select a function.
- ✓ If you return to the menu screen and then display any of the conversion screens, clicking the [x] button on the conversion screen will return to the menu screen without exiting. In this case, click the [x] button on the menu screen to exit.

## 4.2 Execute each function

Execute each function from the menu screen.



## 5 Convert the logging files of the Logging Unit

This section describes the procedure from converting the logging files of the Logging Unit to collecting it with EcoAdviser.

## 5.1 Prepare the logging files

Remove the SD memory card from the Logging Unit and insert it into your computer. For the procedure to remove the SD memory card from the Logging Unit, refer to the user's manual of the Logging Unit.

#### About the logging cycle

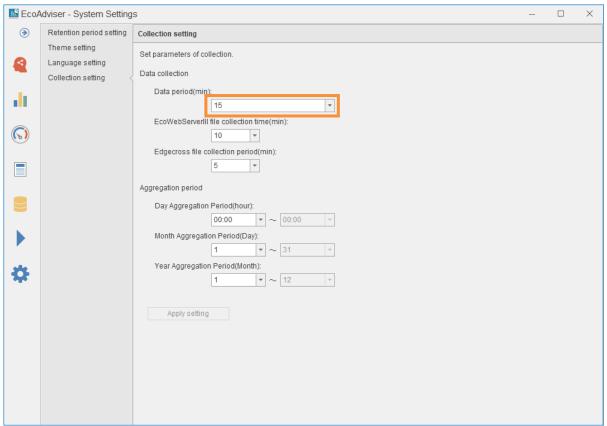
When using the diagnostic function of EcoAdviser, one minute data is required for the logging cycle.

When using the analysis function of EcoAdviser (graphs, reports), 15 minutes / 30 minutes / one hour data is required for the logging cycle.

Also, the data period setting of EcoAdviser and the logging cycle of the Logging Unit must match. If they do not match, the integrated value data cannot be collected correctly.

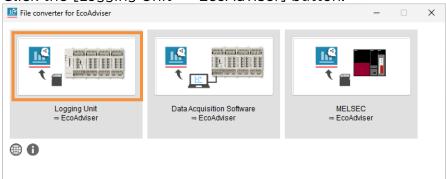
✓ You can check the data period setting of EcoAdviser on "System Settings" 

⇒ "Collection setting".

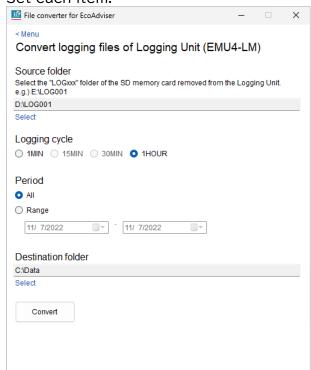


## 5.2 Convert the logging files

1. Click the [Logging Unit ⇒ EcoAdviser] button.

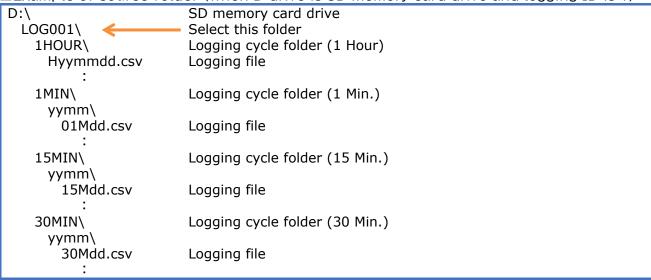


### 2. Set each item.

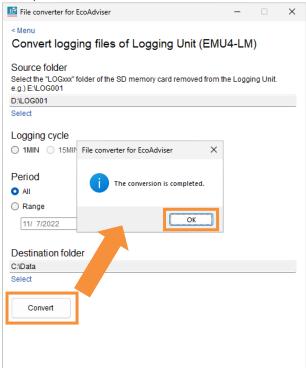


Item	Settings
Source folder	Select the "LOGxxx" (xxx is the logging ID of the Logging Unit) folder on the SD memory card removed from the Logging Unit. Click [Select] and select a folder. You can also select by drag and drop a folder from Explorer.
Logging cycle	Select the logging cycle to be converted. You cannot select a logging cycle that does not exist in the source folder. Select "1MIN" when using the diagnosis function of EcoAdviser. Select "15MIN" / "30MIN" / "1HOUR" when using the analysis function of EcoAdviser.
Period	Select the period to convert. For range specification, select the start date and end date.
Destination folder	Select a folder to output converted files. This will be the "Collection Data folder path" when registering the collection source in EcoAdviser. Click [Select] and select a folder. You can also select by drag and drop a folder from Explorer.

■Example of source folder (when D drive is SD memory card drive and logging ID is 1)



3. Click the [convert] button. The completion message will appear when the conversion is completed.



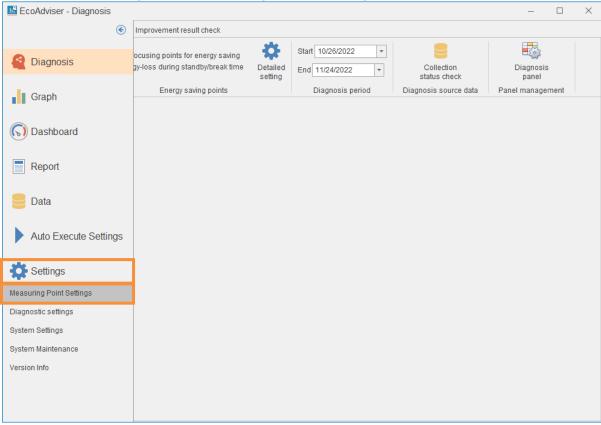
#### Cancel the conversion

The progress will be displayed during the conversion. If you want to cancel, click [Cancel].

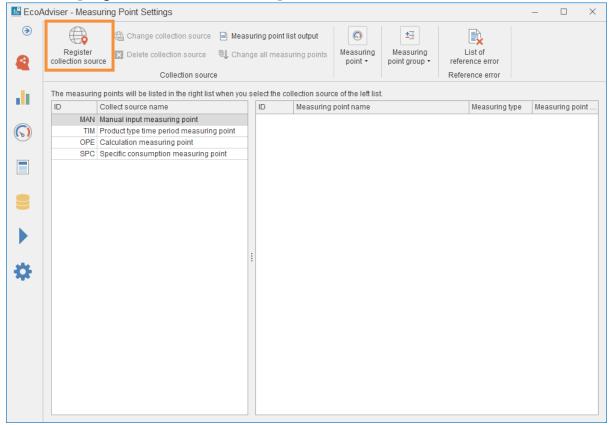


## 5.3 Register "Collection source" with EcoAdviser

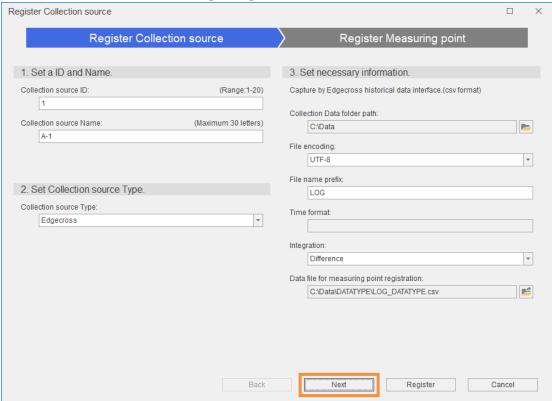
1. Select the [Settings] ⇒ [Measuring Point Settings].



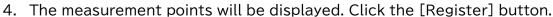
2. Click the [Register collection source].

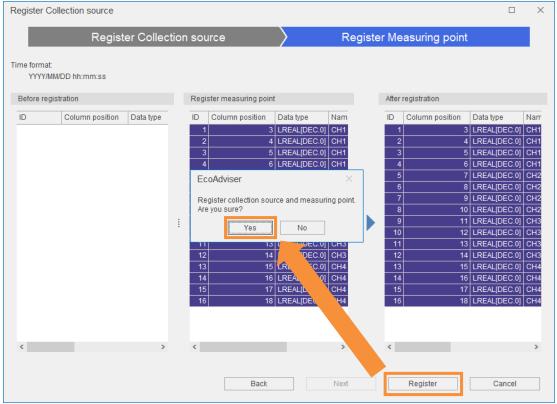


3. Set each item and click the [Next] button.

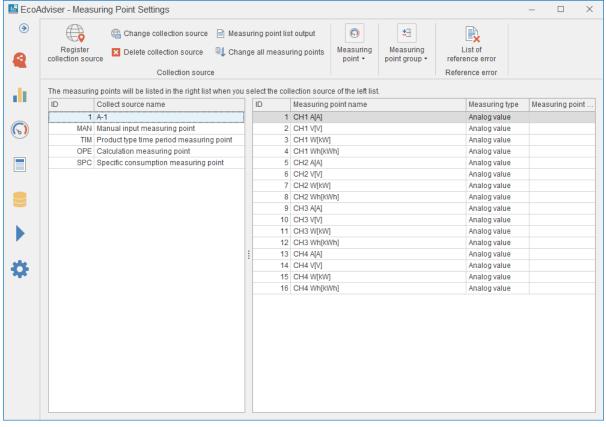


Item	Settings
Collection source ID	Enter any ID.
Collection source Name	Enter any name.
Collection source Type	Select "Edgecross".
Collection Data folder	Select the destination folder of the File converter.
path	
File encoding	Select "UTF-8".
File name prefix	Enter "LOG".
Integration	Select "Difference".
Data file for measuring	Automatically set from [Collection Data folder path] and [File
point registration	name prefix].



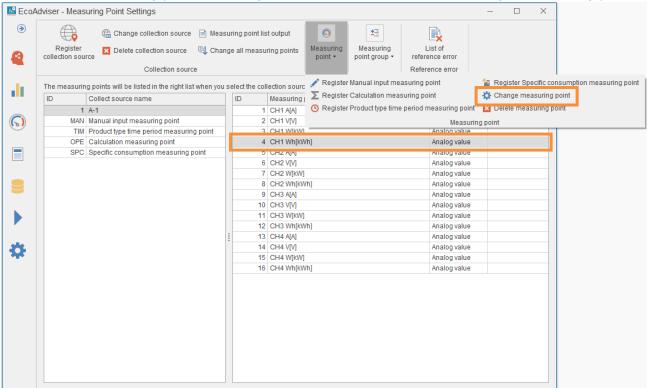


5. The measuring points of the collection source are registered.

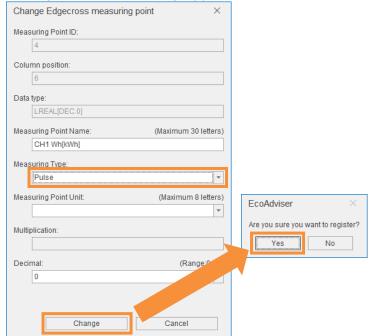


6. Since the [Measuring Type] is registered as "Analog value", change the [Measuring Type] of the integrated value to "Pulse".

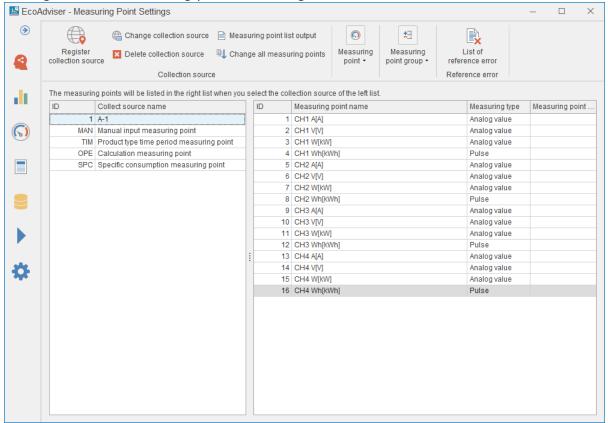
Select the measuring point of integrated value and click the [Change measuring point].



7. Change the [Measuring Type] to "Pulse" and click the [Change] button.



8. Change all the measuring points of integrated value.



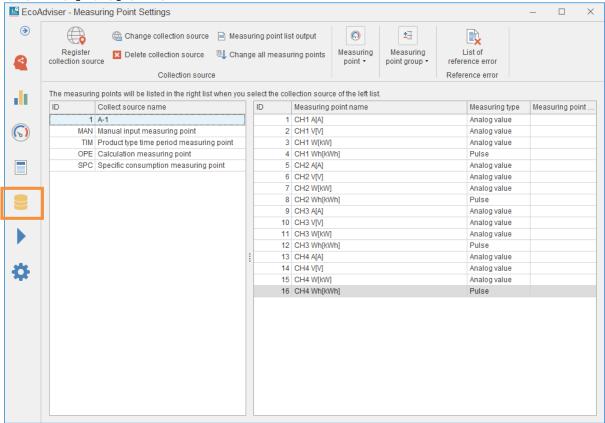
#### Change all the measuring points

If there are many measuring points of integrated value, you can change them all at once by following steps below.

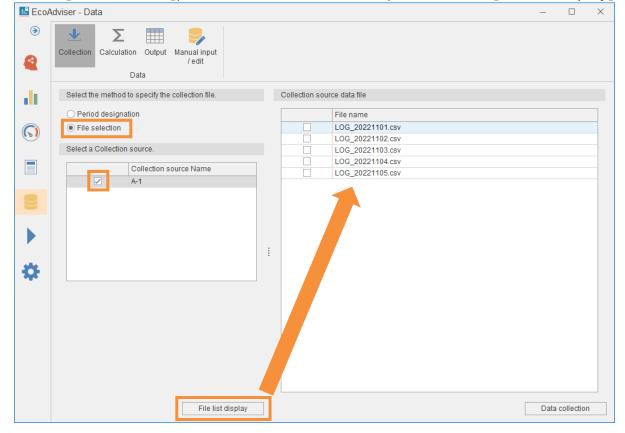
- 1) Click the [Measuring point list output] to output the measuring point list file.
- 2) Open the measuring point list file and change the [Measuring Type] from 2 (Analog value) to 1 (Pulse) for the measuring point of integrated value.
- 3) Save the measuring point list file.
- 4) Click the [Change all measuring points] and specify the edited measuring point list file.

#### 5.4 Collect data with EcoAdviser

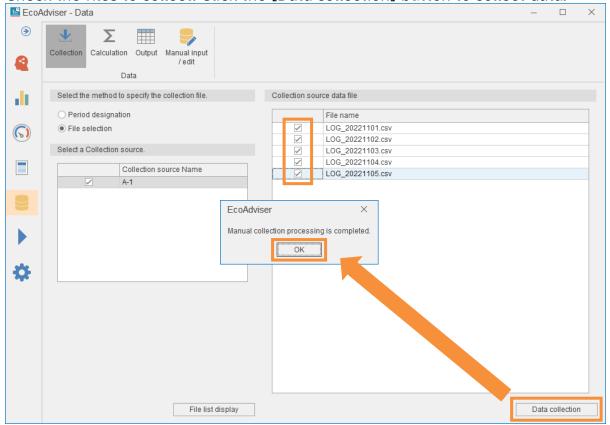
1. Click the [Data] button.



2. Select [File selection], check the collection source, and click the [File list display] button.

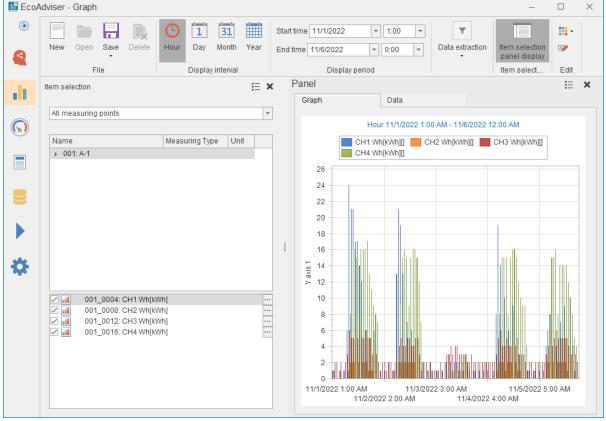


3. Check the files to collect. Click the [Data collection] button to collect data.



4. View the collected data in graphs and so on.

■Display example of a time series chart.



## 6 Convert the logging files of the Data Acquisition Software

This section describes the procedure from converting the logging files of the Data Acquisition Software to collecting it with EcoAdviser.

## 6.1 Prepare the logging files

When converting on a computer other than the Data Acquisition Software, copy the entire "LogData" folder in the installation folder of the Data Acquisition Software.

#### About the logging cycle

When using the diagnostic function of EcoAdviser, one minute data is required for the logging cycle.

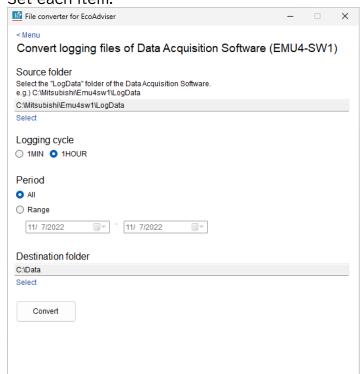
When using the analysis function of EcoAdviser (graphs, reports), one minute or one hour data is required for the logging cycle.

### 6.2 Convert the logging files

Click the [Data Acquisition Software ⇒ EcoAdviser] button.

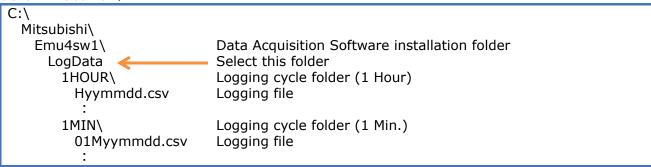


2. Set each item.

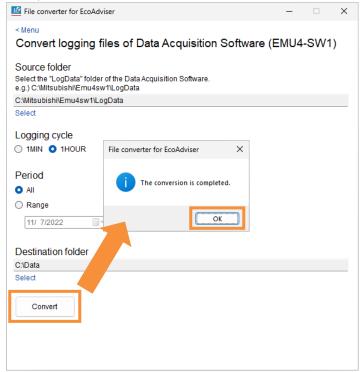


Item	Settings
Source	Select the "LogData" folder of the Data Acquisition Software.
folder	Click [Select] and select a folder.
	You can also select by drag and drop a folder from Explorer.
Logging	Select the logging cycle to be converted.
cycle	You cannot select a logging cycle that does not exist in the source
	folder.
	Select "1MIN" when using the diagnosis function of EcoAdviser.
Period	Select the period to convert.
	For range specification, select the start date and end date.
Destination	Select a folder to output converted files.
folder	This will be the "Collection Data folder path" when registering the
	collection source in EcoAdviser.
	Click [Select] and select a folder.
	You can also select by drag and drop a folder from Explorer.

■ Example of source folder (When the Data Acquisition Software is installed in the default location)



3. Click the [convert] button. The completion message will appear when the conversion is completed.



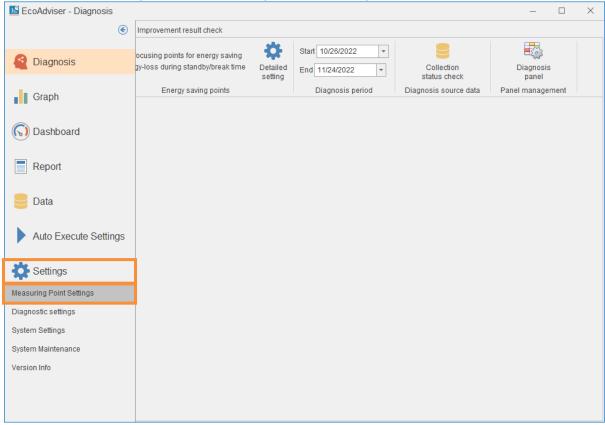
## Cancel the conversion

The progress will be displayed during the conversion. If you want to cancel, click [Cancel].

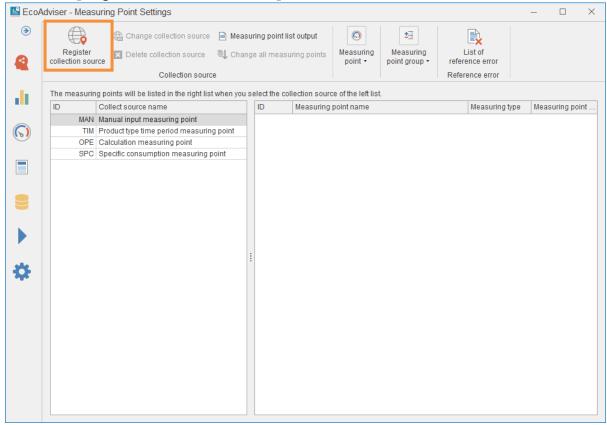


## 6.3 Register "Collection source" with EcoAdviser

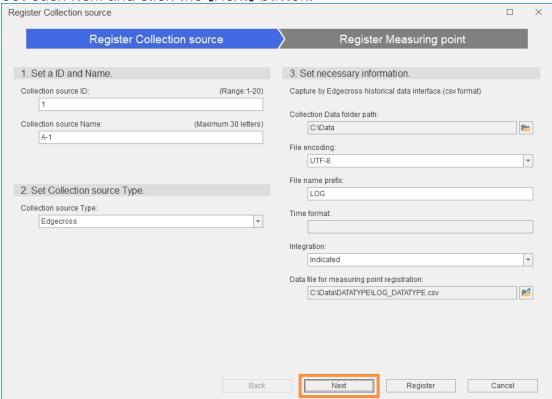
1. Select the [Settings] ⇒ [Measuring Point Settings].



2. Click the [Register collection source].

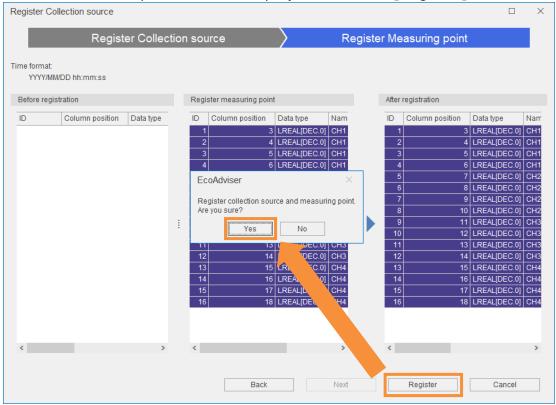


3. Set each item and click the [Next] button.

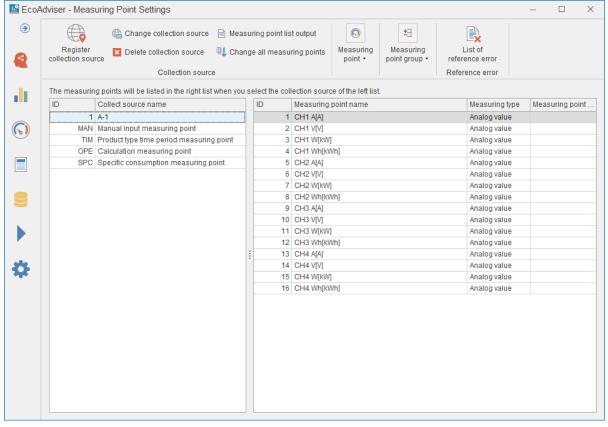


Item	Settings
Collection source ID	Enter any ID.
Collection source Name	Enter any name.
Collection source Type	Select "Edgecross".
Collection Data folder	Select the destination folder of the File converter.
path	
File encoding	Select "UTF-8".
File name prefix	Enter "LOG".
Integration	Select "Indicated".
Data file for measuring point registration	Automatically set from [Collection Data folder path] and [File name prefix].



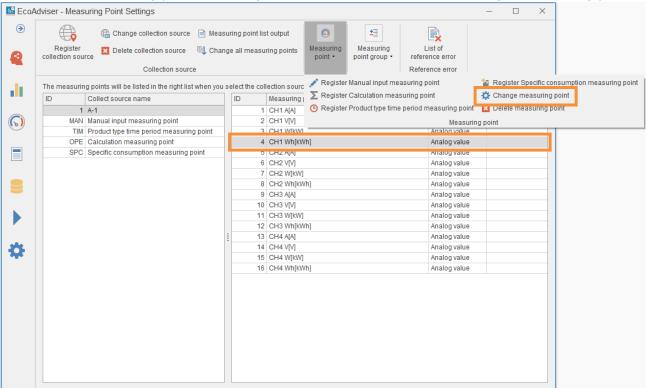


5. The measuring points of the collection source are registered.

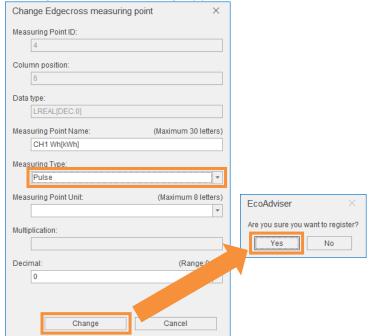


6. Since the [Measuring Type] is registered as "Analog value", change the [Measuring Type] of the integrated value to "Pulse".

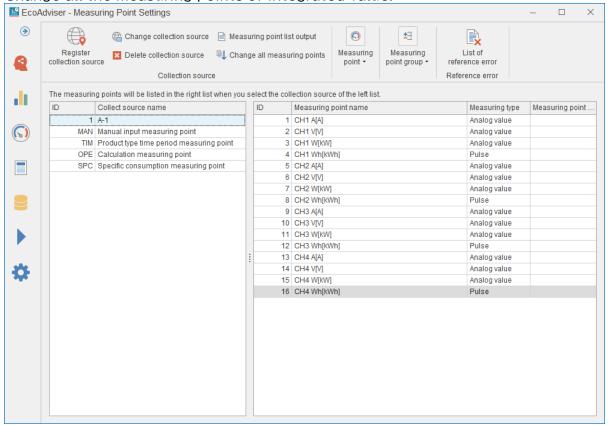
Select the measuring point of integrated value and click the [Change measuring point].



7. Change the [Measuring Type] to "Pulse" and click the [Change] button.



8. Change all the measuring points of integrated value.



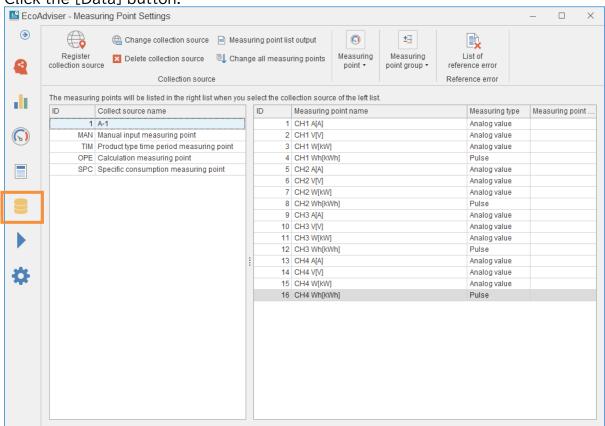
#### Change all the measuring points

If there are many measuring points of integrated value, you can change them all at once by following steps below.

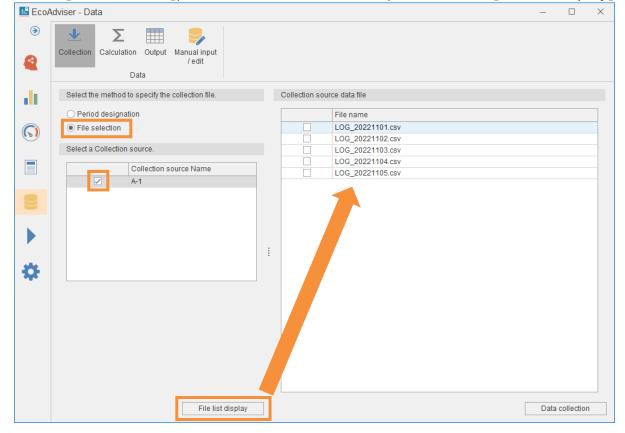
- 1) Click the [Measuring point list output] to output the measuring point list file.
- 2) Open the measuring point list file and change the [Measuring Type] from 2 (Analog value) to 1 (Pulse) for the measuring point of integrated value.
- 3) Save the measuring point list file.
- 4) Click the [Change all measuring points] and specify the edited measuring point list file.

#### 6.4 Collect data with EcoAdviser

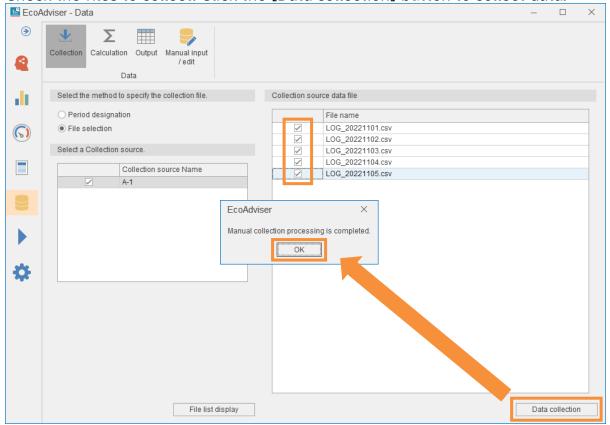
1. Click the [Data] button.



2. Select [File selection], check the collection source, and click the [File list display] button.

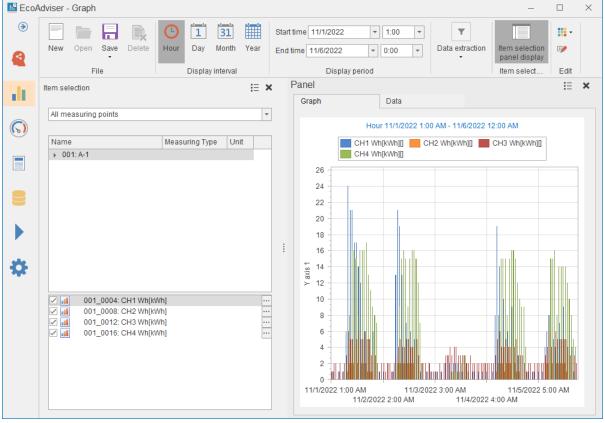


3. Check the files to collect. Click the [Data collection] button to collect data.



4. View the collected data in graphs and so on.

■Display example of a time series chart.



## 7 Convert the logging files of the MELSEC

This section describes the procedure from converting the logging files of the MELSEC to collecting it with EcoAdviser.

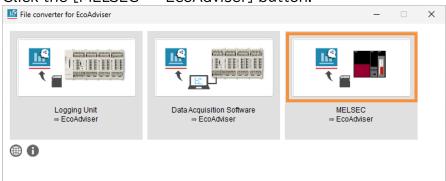
## 7.1 Prepare the logging files

Import the logging files of the MELSEC to your computer.

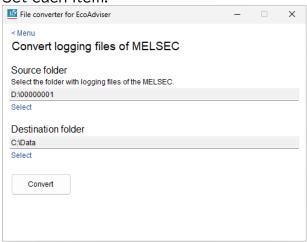
Please refer to the user's manual for the model you are using for how to import.

### 7.2 Convert the logging files

1. Click the [MELSEC ⇒ EcoAdviser] button.

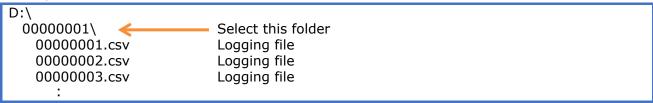


### 2. Set each item.

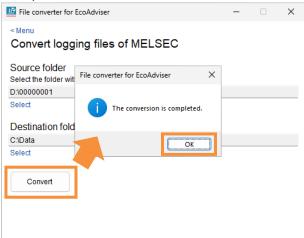


Item	Settings
Source folder	Select the folder with logging files of the MELSEC. Click [Select] and select a folder. You can also select by drag and drop a folder from Explorer.
Destination folder	Select a folder to output converted files. This will be the "Collection Data folder path" when registering the collection source in EcoAdviser. Click [Select] and select a folder. You can also select by drag and drop a folder from Explorer.

■Example of source folder (When the logging files are imported to the D:\00000001 folder)



3. Click the [convert] button. The completion message will appear when the conversion is completed.



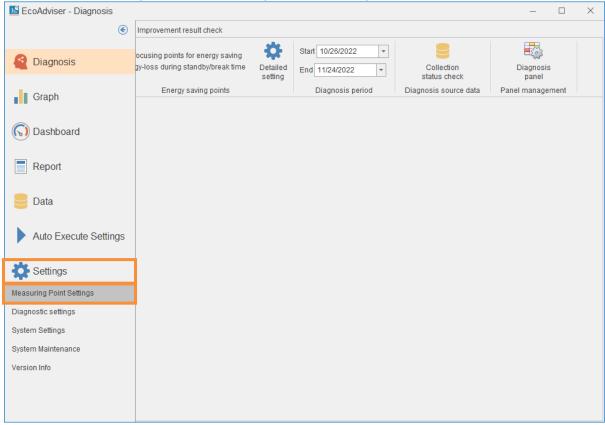
#### Cancel the conversion

The progress will be displayed during the conversion. If you want to cancel, click [Cancel].

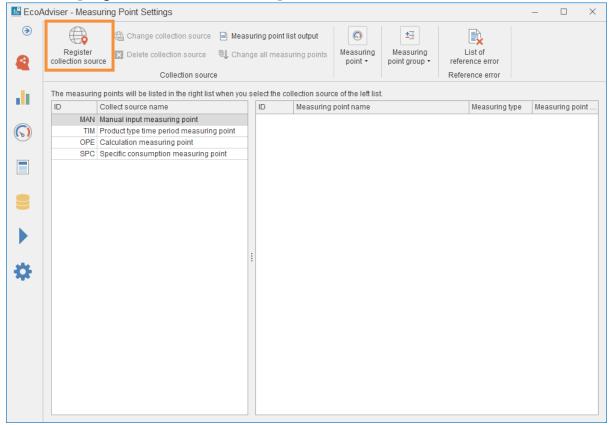


## 7.3 Register "Collection source" with EcoAdviser

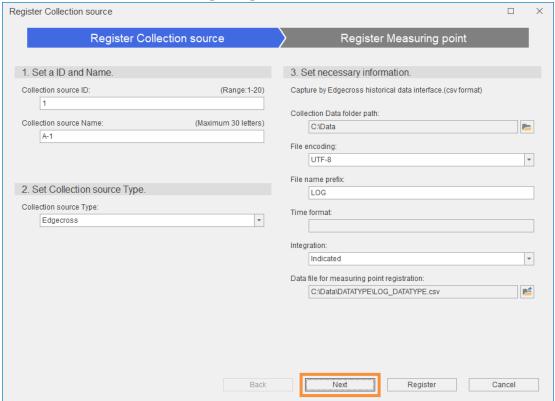
1. Select the [Settings] ⇒ [Measuring Point Settings].



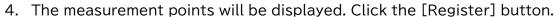
2. Click the [Register collection source].

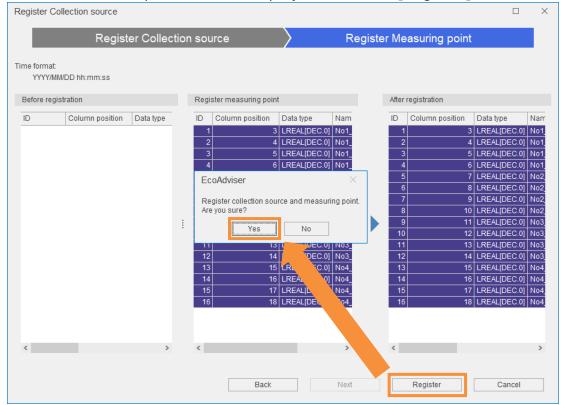


3. Set each item and click the [Next] button.

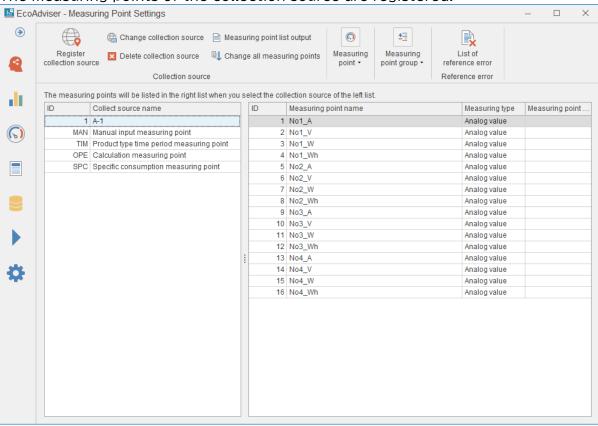


Item	Settings
Collection source ID	Enter any ID.
Collection source Name	Enter any name.
Collection source Type	Select "Edgecross".
Collection Data folder path	Select the destination folder of the File converter.
File encoding	Select "UTF-8".
File name prefix	Enter "LOG".
Integration	Select "Indicated".
Data file for measuring point registration	Automatically set from [Collection Data folder path] and [File name prefix].



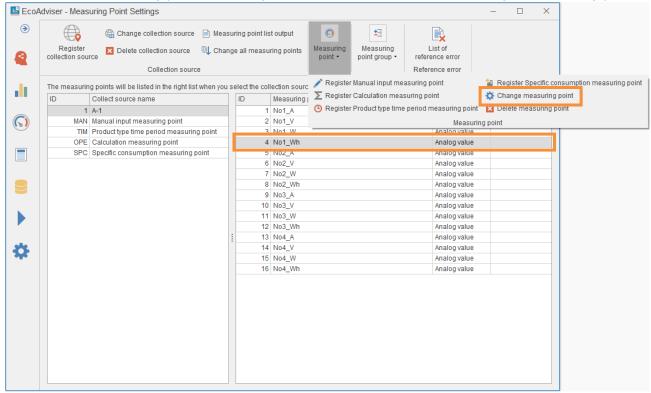


5. The measuring points of the collection source are registered.

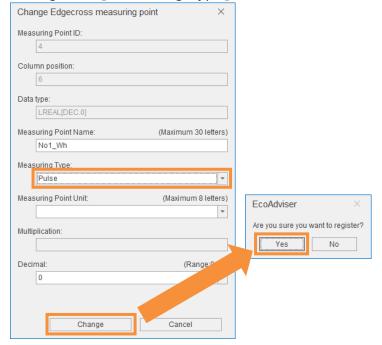


6. Since the [Measuring Type] is registered as "Analog value", change the [Measuring Type] of the integrated value to "Pulse".

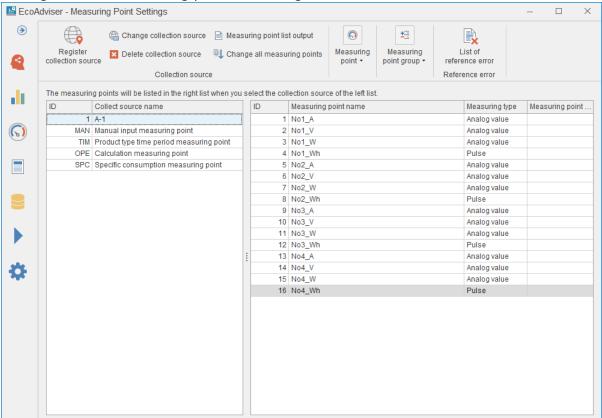
Select the measuring point of integrated value and click the [Change measuring point].



7. Change the [Measuring Type] to "Pulse" and click the [Change] button.



8. Change all the measuring points of integrated value.



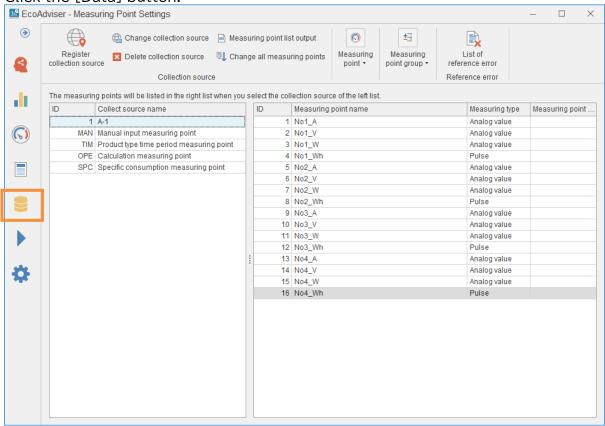
#### Change all the measuring points

If there are many measuring points of integrated value, you can change them all at once by following steps below.

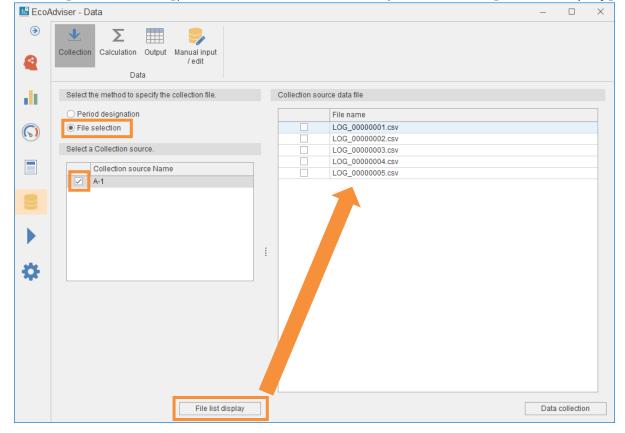
- 1) Click the [Measuring point list output] to output the measuring point list file.
- 2) Open the measuring point list file and change the [Measuring Type] from 2 (Analog value) to 1 (Pulse) for the measuring point of integrated value.
- 3) Save the measuring point list file.
- 4) Click the [Change all measuring points] and specify the edited measuring point list file.

#### 7.4 Collect data with EcoAdviser

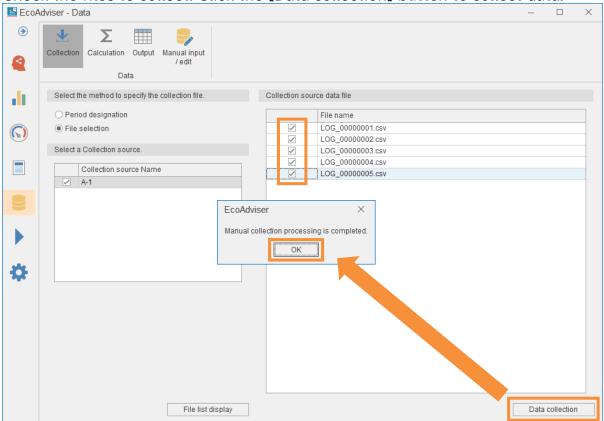
1. Click the [Data] button.



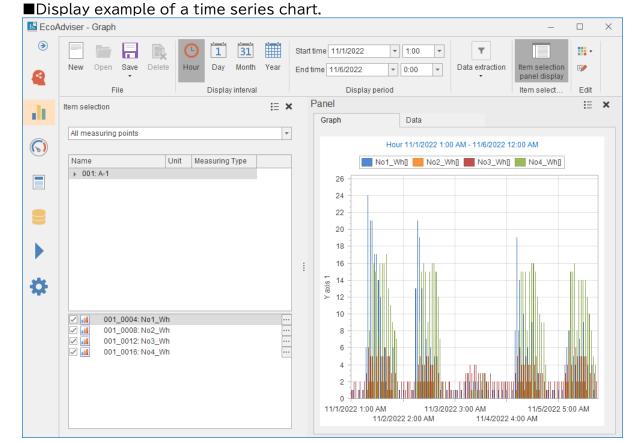
2. Select [File selection], check the collection source, and click the [File list display] button.



3. Check the files to collect. Click the [Data collection] button to collect data.



4. View the collected data in graphs and so on.



## 8 Troubleshooting

## 8.1 Error message and corrective action

This section describes corrective actions when an error message is displayed in this software.

Message	Corrective action
Failed to read the logging file config.	Are you running from the executable file displayed by double-clicking without unzipping the downloaded compressed file? In that case, decompress the compressed file and execute it.  •-3.1 Download
Select the source folder.	Select the source folder.
There is no selected source folder.	Check if the selected source folder exists.
Select the destination folder.	Select the destination folder.
There is no selected destination folder.	Check if the selected destination folder exists.
The source folder and the destination folder are the same.	Select a folder different from the source folder for the destination folder.
There is no file to be converted.	Select the folder containing the logging files to be converted.
	If you specify a range of periods, check if there is a logging file for the specified period.
Failed to read logging file. <source file="" path=""/>	Check if the format of the conversion source file is correct.
Failed to convert to data type file. <source file="" path=""/>	Close any files in the destination folder that are open in other applications.
Failed to convert to data file. <source file="" path=""/>	Close any files in the destination folder that are open in other applications.

## 8.2 Troubleshooting when collecting data with EcoAdviser

This section describes problems that occur when EcoAdviser collects files converted by this software and corrective action.

Problem	Check point	Corrective action
Data collection fails.	Are the data times of the logging file duplicated?	Collect data after removing duplicate data time records.
Data had some missing parts.	<pre><target: logging="" unit=""> Does the data period setting of EcoAdviser match the logging cycle of the logging file?</target:></pre>	Collect data after changing the data period setting of EcoAdviser to match the logging cycle of the logging file.
	<pre><target :="" acquisition="" data="" melsec="" software,=""> Are you using a logging file whose logging cycle is longer than the data period setting of EcoAdviser?</target></pre>	Use a logging file with a logging cycle that is equal to or less than the data period setting of EcoAdviser.
The integrated value becomes an abnormal value.	Is the integration set correctly in the collection source settings of EcoAdviser?	Collect data after correctly setting the integration in the collection source settings of EcoAdviser. <integration> Logging Unit: Difference Data Acquisition Software: Indicated MELSEC: Indicated</integration>
	Is the "Measuring Type" set to "Pulse" in the EcoAdviser measuring point settings?	Collect data after setting the "Measuring Type" to "Pulse" in the EcoAdviser measuring point settings.
	<pre><target: logging="" unit=""> Does the data period setting of EcoAdviser match the logging cycle of the logging file?</target:></pre>	Collect data after changing the data period setting of EcoAdviser to match the logging cycle of the logging file.

## 9 Appendix

## 9.1 Q&A

Q	Can I use the converted data in the EcoAdviser dashboard?			
Α	You can paste the converted data into the dashboard, but the data will not automatically refresh.			
Q	Can the converted data file be used in systems other than EcoAdviser?			

We do not support the use of anything other than EcoAdviser.

## 9.2 Release notes

Version	Contents
1.0.0	The first release version.

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## File converter for EcoAdviser

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Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia	Intehsis SRL Sirius Trading & Services SRL Mitsubishi Electric (Russia) LLC Center of Electrical Goods Mitsubishi Electric Asia Pte. Ltd. PROCONT, Presov SIMAP Inea RBT d.o.o.	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovenia	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3  2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943  Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubijana, Slovenia  Private Bag 2016, ZA-1600 Isando Gauteng, South Africa	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3  2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943  Kupelna 1/, SK - 08001 Presov, Slovakia  Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovenia  Private Baq 2016, ZA-1600 Isando Gauteng, South Africa  Carretera de Rubi 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +336 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch  Mitsubishi Electric Europe B.V. (Scandinavia)	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3  2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943  Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubijana, Slovenia  Private Bag 2016, ZA-1600 Isando Gauteng, South Africa	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovenia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubí 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +55-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch  Mitsubishi Electric Europe B.V. (Scandinavia)  Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3  2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943  Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubijana, Slovenia  Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubi 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch  Mitsubishi Electric Europe B.V. (Scandinavia)  Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.  MITSUBISHI ELECTRIC FACTORY	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3  2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943  Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovenia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubí 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425 +66-223-4220-3
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden Switzerland	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch Mitsubishi Electric Europe B.V. (Scandinavia) Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.  MITSUBISHI ELECTRIC FACTORY AUTOMATION	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3  2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943  Kupelna 1/, SK - 08001 Presov, Stovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovenia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubí 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland 77/12 Bamrungmuang Road,Klong Mahanak Pomprab Bangkok Thailand	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden Switzerland Thailand	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch  Mitsubishi Electric Europe B.V. (Scandinavia)  Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.  MITSUBISHI ELECTRIC FACTORY  AUTOMATION  (THAILAND) CO.,LTD	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovakia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubi 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland 77/1/2 Bamrungmuang Road,Klong Mahanak Pomprab Bangkok Thailand  101, True Digital Park Office, 5th Floor, Sukhumvit Road, Bangchak, Phara Khanong, Bangkok, 10260 Thailand	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425 +66-223-4220-3 +662-092-8600
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden Switzerland	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch Mitsubishi Electric Europe B.V. (Scandinavia) Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.  MITSUBISHI ELECTRIC FACTORY AUTOMATION	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovakia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubi 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland 77/1/2 Bamrungmuang Road, Klong Mahanak Pomprab Bangkok Thailand 101, True Digital Park Office, 5th Floor, Sukhumvit Road, Bangchak, Phara Khanong, Bangkok, 10260	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425 +66-223-4220-3
Moldova Romania Russia Saudi Arabia Singapore Slovakia South Africa Spain Sweden Switzerland Thailand Tunisia Turkey United Kingdom	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch  Mitsubishi Electric Europe B.V. (Scandinavia)  Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.  MITSUBISHI ELECTRIC FACTORY  AUTOMATION  (THAILAND) CO.,LTD  MOTRA Electric  Mitsubishi Electric Turkey A.Ş.  Mitsubishi Electric Turkey A.Ş.	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, Sl-1000 Ljubljana, Slovakia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubi 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland 77/1/2 Barmungmuang Road, Klong Mahanak Pomprab Bangkok Thailand 101, True Digital Park Office, 5th Floor, Sukhumvit Road, Bangchak, Phara Khanong, Bangkok, 10260 Thailand 3, Résidence Imen, Avenue des Martyrs Mourouj III, 2074 - El Mourouj III Ben Arous, Tunisia Şerifali Mahallesi Kale Sokak No: 41, 34775 Ümraniye, Istanbul, Turkey Travellers Lane, UK-Hatfield, Herts. AL 10 8XB, United Kingdom	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425 +66-223-4220-3 +662-092-8600 +216-71 474 599 +90-216-969-2666 +44 (0)1707-276100
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden Switzerland Thailand Tunisia Turkey	Intehsis SRL  Sirius Trading & Services SRL Mitsubishi Electric (Russia) LLC Center of Electrical Goods Mitsubishi Electric Asia Pte. Ltd. PROCONT, Presov SIMAP Inea RBT d.o.o. CBI-electric: low voltage Mitsubishi Electric Europe B.V. Spanish Branch Mitsubishi Electric Europe B.V. (Scandinavia) Euro Energy Components AB TriElec AG United Trading & Import Co., Ltd. MITSUBISHI ELECTRIC FACTORY AUTOMATION (THAILAND) CO.,LTD MOTRA Electric Mitsubishi Electric Turkey A.Ş.	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Liubijana, Slovenia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubi 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland 77/12 Bamrungmuang Road, Klong Mahanak Pomprab Bangkok Thailand 101, True Digital Park Office, 5th Floor, Sukhumvit Road, Bangchak, Phara Khanong, Bangkok, 10260 Thailand 3, Résidence Imen, Avenue des Martyrs Mourouj III, 2074 - El Mourouj III Ben Arous, Tunisia Şerifali Mahallesi Kale Sokak No: 41, 34775 Ümraniye, Istanbul, Turkey Travellers Lane, UK-Hatfield, Herts. Al. 10 8XB, United Kingdom Avda. Uruguay 1274 Montevideo Uruguay	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425 +66-223-4220-3 +662-092-8600 +216-71 474 599 +90-216-969-2666
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden Switzerland Thailand Tunisia Turkey United Kingdom Uruguay	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch  Mitsubishi Electric Europe B.V. (Scandinavia)  Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.  MITSUBISHI ELECTRIC FACTORY  AUTOMATION  (THAILAND) CO.,LTD  MOTRA Electric  Mitsubishi Electric Turkey A.Ş.  Mitsubishi Electric Turkey A.Ş.	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld 1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Ljubljana, Slovenia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubí 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland 77/12 Bamrungmuang Road,Klong Mahanak Pomprab Bangkok Thailand 101, True Digital Park Office, 5th Floor, Sukhumvit Road, Bangchak, Phara Khanong, Bangkok, 10260 Thailand 3, Résidence Imen, Avenue des Martyrs Mourouj III, 2074 - El Mourouj III Ben Arous, Tunisia Şerifali Mahallesi Kale Sokak No: 41, 34775 Ümraniye, İstanbul, Turkey Travellers Lane, UK-Haffield, Herts. AL10 8/B, United Kingdom Avda. Uruguay 1274 Montevideo Uruguay 11th & 12th Floor, Viettel Tower B, 285 Cach Mang Thang 8 Street, Ward 12, District 10, Ho Chi Minh	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425 +66-223-4220-3 +662-092-8600 +216-71 474 599 +90-216-969-2666 +44 (0)1707-276100
Moldova Romania Russia Saudi Arabia Singapore Slovakia Slovenia South Africa Spain Sweden Switzerland Thailand Tunisia Turkey United Kingdom	Intehsis SRL  Sirius Trading & Services SRL  Mitsubishi Electric (Russia) LLC  Center of Electrical Goods  Mitsubishi Electric Asia Pte. Ltd.  PROCONT, Presov  SIMAP  Inea RBT d.o.o.  CBI-electric: low voltage  Mitsubishi Electric Europe B.V. Spanish Branch  Mitsubishi Electric Europe B.V. (Scandinavia)  Euro Energy Components AB  TriElec AG  United Trading & Import Co., Ltd.  MITSUBISHI ELECTRIC FACTORY  AUTOMATION  (THAILAND) CO.,LTD  MOTRA Electric  Mitsubishi Electric Turkey A.Ş.  Mitsubishi Electric Turcey B.V.  Fierro Vignoli S.A.	RO-060841 Bucuresti, Sector 6 Aleea Lacul Morii Nr. 3 2 bld.1, Letnikovskaya street, Moscow, 115114, Russia Al-Shuwayer St. Side way of Salahuddin Al-Ayoubi St. P.O. Box 15955 Riyadh 11454 - Saudi Arabia 307 Alexandra Road, Mitsubishi Electric Building, Singapore 159943 Kupelna 1/, SK - 08001 Presov, Slovakia Jana Derku 1671, SK - 91101 Trencin, Slovakia Stegne 11, SI-1000 Liubijana, Slovenia Private Bag 2016, ZA-1600 Isando Gauteng, South Africa Carretera de Rubi 76-80, E-08190 Sant Cugat del Vallés (Barcelona), Spain Hedvig Möllers gata 6, 223 55 Lund, Sweden Järnvägsgatan 36, S-434 24 Kungsbacka, Sweden Muehlentalstrasse 136, CH-8201 Schaffhausen, Switzerland 77/12 Bamrungmuang Road, Klong Mahanak Pomprab Bangkok Thailand 101, True Digital Park Office, 5th Floor, Sukhumvit Road, Bangchak, Phara Khanong, Bangkok, 10260 Thailand 3, Résidence Imen, Avenue des Martyrs Mourouj III, 2074 - El Mourouj III Ben Arous, Tunisia Şerifali Mahallesi Kale Sokak No: 41, 34775 Ümraniye, Istanbul, Turkey Travellers Lane, UK-Hatfield, Herts. Al. 10 8XB, United Kingdom Avda. Uruguay 1274 Montevideo Uruguay	+40-(0)21-430-40-06 +7 495 721-2070 +966-1-4770149 +65-6473-2308 +421 (0)51 - 7580 611 +421 (0)32 743 04 72 +386 (0)1-513-8116 +27-(0)11-9282000 +34 (0)93-565-3131 +46 (0)8-625-10-00 +46 (0)300-690040 +41-(0)52-6258425 +66-223-4220-3 +662-092-8600 +216-71 474 599 +90-216-969-2666 +44 (0)1707-276100 +598-2-902-0808

# MITSUBISHI ELECTRIC CORPORATION HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN