

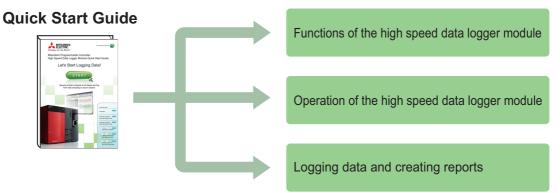
Programmable Controller High Speed Data Logger Module Quick Start Guide

Let's Start Logging Data!



Introduction

This Quick Start Guide explains the basic procedures for first-time users of the high speed data logger module.



Precautions

Thoroughly read "SAFETY PRECAUTIONS" found in the QCPU User's Manual before using programmable controllers. Please pay careful attention to safety and handle the products properly.

Related manuals

The following manuals are related to the products introduced in this guide.

High Speed Data Logger Module User's Manual	SH-080818ENG
GX LogViewer Version1 Operating Manual	SH-080915ENG
QCPU User's Manual (Hardware Design, Maintenance and Inspection)	SH-080483ENG
GX Developer Version8 Operating Manual	SH-080373E
GX Works2 Version1 Operating Manual (Common)	SH-080779ENG

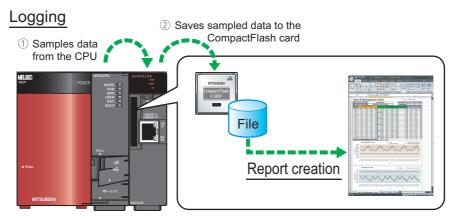
How to read this guide

The following table shows the symbols used in this guide with descriptions and examples.

Symbol	Description	Example
Remark	Remarks	When using the report creation function, the data logging file format must be set to "Binary file".
[]	Menu names on the menu bar ([] \rightarrow [] indicates drop-down menus.)	Select [Online] \rightarrow [Transfer Setup].
	Buttons on the screen	Click the OK button.

Functions of the high speed data logger module

The high speed data logger module is a module that logs (records and saves) sampled programmable controller CPU data and saves them to a CompactFlash card as a file. Reports can be created from the logged file in Excel format.



Functions

'Data logging', 'Event logging', and 'Report' are the three major functions of the high speed data logger module.

Data logging	:	A function to log programmable controller CPU data at the specified data sampling interval.
Event logging	:	A function to monitor data sampled from the programmable controller CPU and log occurred events.
Report	:	A function to create reports with values and graphs obtained from data logging files and data sampled by the programmable controller CPU. The Excel layout for the report needs to be configured in advance.

The following are the two data logging methods:

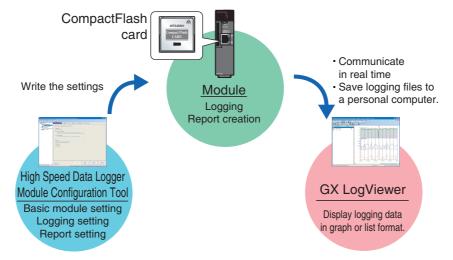
 Continuous logging
 :
 Continuously logs data at the specified data sampling interval, and creates data logging files.

 Trigger logging
 :
 Logs data before and after the trigger occurrence (establishment of specified condition), and creates data logging files.

High speed data logger module and relevant tools

The following are the relevant tools of high speed data logger module.

- 'High Speed Data Logger Module Configuration Tool' to configure settings of high speed data logger module.
- 'GX LogViewer' to display logged data.



Operation of the Operating high speed data logger module

Use this guide to understand the operation of the high speed data logger module by actually configuring the 'trigger logging', 'continuous logging', and 'report' settings.

Descriptions in this guide

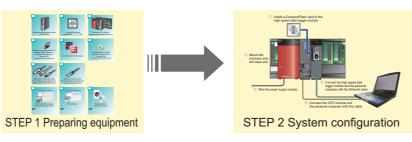




Page	Introduced function	Description
CASE 1		Logging data before and after trigger occurrence
P7-	Trigger logging	This section uses an example to explain the trigger logging function and how to confirm logged data.
CASE 2	Continuous	Creating reports from continuously logged data
P16-	logging report	This section uses an example to explain the continuous logging function and report creation.
		logging function and report creation.

Preparation **Preparing for operation**

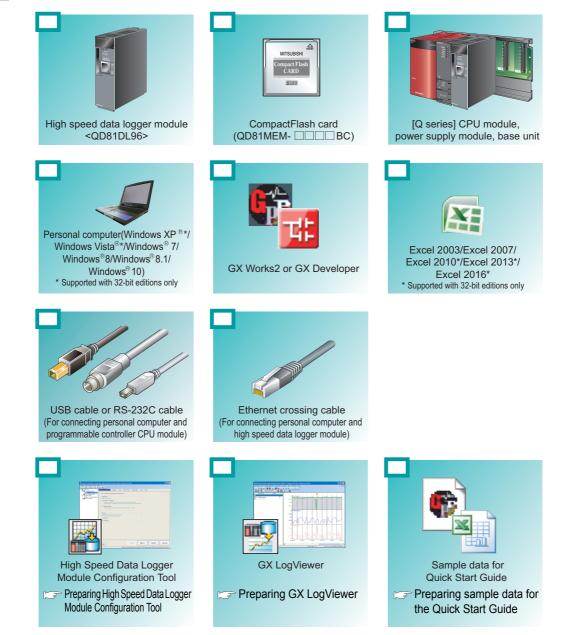
This section describes the preparation for operations instructed in CASE 1 and CASE 2.



STEP(1) Preparing equipment

Prepare the equipment and software needed in CASE 1 and CASE 2.

Items to prepare



In this guide, Excel 2003 or Excel 2007 is used in explanations.

Preparing High Speed Data Logger Module Configuration Tool

For the acquisition of High Speed Data Logger Module Configuration Tool, contact your local Mitsubishi representative.

Please install the acquired tool.

Preparing GX LogViewer

For the acquisition of GX LogViewer, contact your local Mitsubishi representative.

Please install the acquired tool.

Preparing sample data for the Quick Start Guide

To obtain the sample data used in CASE 1 and CASE 2 in this guide, contact your local Mitsubishi representative.

Files included in sample data

- Sequence program (I08147eng-program_a): A GX Developer project file to be used in CASE 1 and CASE 2.
- Layout file (I08147eng-layout_a.xls): An Excel format file for report to be used in CASE 2.
- Logging result file (I08147eng-CASE1_a.CSV): A CSV file whose data are logged according to the procedure in CASE 1.

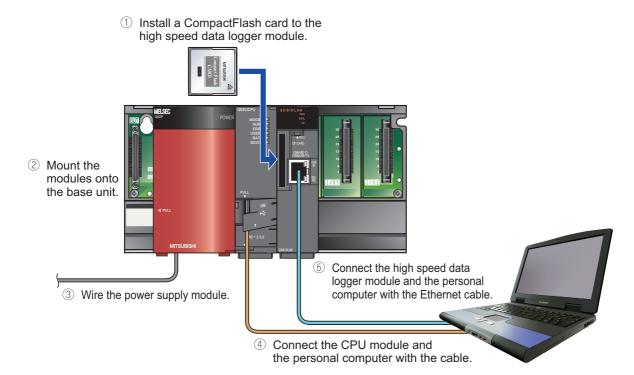
	ō
	÷
	Ø
	5
	G
	0
	e
	2
	-
\sim	

STEP 2 System configuration

Configure the programmable controller system used in CASE 1 and CASE 2.

STEP 2-1 Mounting and wiring modules

Follow the instructions in order from 1 to 5 .



STEP 2-2 Activating the system

- ① Power ON the power supply module.
- ② Write the sequence program (I08147eng-program_a) to the CPU module using GX Developer or GX Works2.
- ③ Switch the mode of the CPU module to 'RUN'.

Precautions

The instructions in this guide are described according to the above programmable controller system configuration.

When designing and operating an actual system, read the manuals listed on the following page.

Related manuals (P. 1)

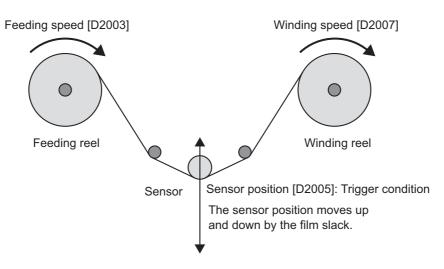
CASE 1 Logging data before and after trigger occurrence

This section explains how to perform the 'trigger logging' function using the equipment shown in the figure below as an example.

Figure

The following equipment is a winder for packaging film.

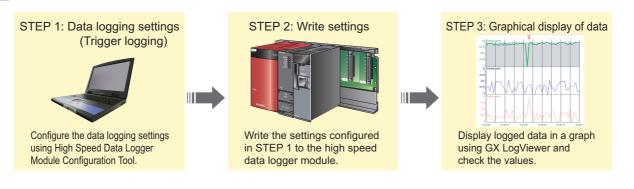
The sensor position moves up and down according to variation in the feeding reel speed, and a trigger (error) occurs when the allowable range is exceeded 100 lines (records) of data before and after the trigger occurrence are saved in a file.



Data logging settings

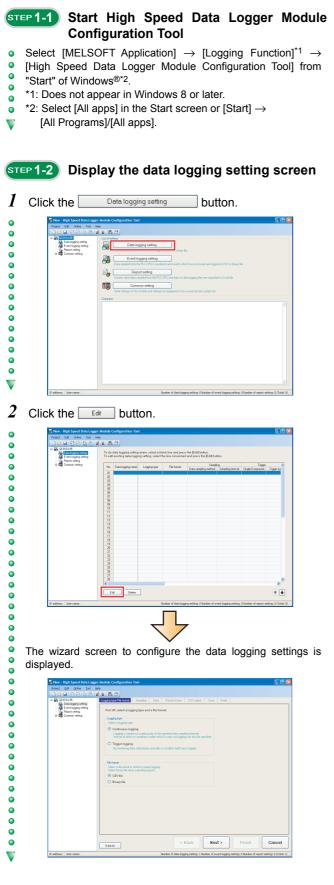
Target data	:	Feeding speed [D2003 (word [signed])], Winding speed [D2007 (word [signed])],
		Sensor position [D2005 (word [signed])]
Trigger condition	:	Sensor position $>$ 5, sensor position $<$ -5
Data sampling interval	:	0.1 second
Number of logging lines	:	100 lines before trigger occurrence, 100 lines after trigger occurrence
Saved file format	:	CSV file

Operation flow



STEP Data logging settings (Trigger logging)

Configure the settings to log the programmable controller CPU data before and after the establishment of a trigger condition.



STEP 1-3 Select the logging type and the file format

I Select "Trigger logging" for the logging type, and "CSV file" for the file format.

Bratect Edit Statime Tool Relp	
🕞 🖬 💭 🖓 👘 📽 🛣 🧱 🚓 ar 🙀 Q08101.56 boyleg space for format Sanceley Data Tagger Number of logging lines CSV output Sance Freinh	
Contract Leads to be a contract of the second of the	
Fieldman State 1 is from 2 is official to subscription State 2 is from 2 is official to subscription States 1 is official to subscription States 1 is official to subscription States 1 is official to subscription	
	_
Destr Sack Next > Finish C	anc

-

•

•

0

•

٠

0

•

•

•

٠

•

ō

0

V

٥

STEP 1-4 Select the data sampling method

1 Select "General sampling", and enter "0.1" for "Time specification".

Data be	Isampling yond 256 device p Uvia the network (iled. Dal
Sampli	ng interval me specification	_		Second
Bergan and Arter and a second and Bergan and		s complete intervel. Ingle accompletion Ingle accompletion Ingl	Vestget See Feed.	

2 Click the Next> button.

ST	^{⊑ℙ} 1-5 Se	et the target data
1		e data to be logged.
•	Enter data a	as shown in the screen below.
•	No.	Data name Dev Head Scaling
ě	001	Freeding speed D2003
0	002	Winding speed D2007 /100
•	(303	
0		Control of the second sec
ě		
0		
•		
0		Dem Bath new
0	Default valu	es are automatically displayed for "Device" (Last),
▼	"Access targ	get CPU", "Data type", and "Output Format".
2	Click the	Next > button.
•		
•		
ЯΤ	[⊑] ₽ 1-6) Co	onfigure the trigger settings
1		ompound conditions".
•		
0	Broject Edit Online	
•	Bool of the control of the cont	Viaita station for logger condition. © Single condition 6 Tager room
0		

📓 New - High Speed Data Log	ger Hadule Configuration Tool 📃 🗖
Braject Edit Online Icol	
Data logging setting Event logging setting	Logging type/File format Sampling Data Topyx Number of logging lines CSV output Save Finish
- I Beport setting	Make settings for higger conditions.
🛓 📖 Common setting	Single condition O Compound condition
	Edit Tégger type Content
	Setting a period of time No setting
	Specily a period of time during which to carry out tigger monitoring.
	Period Cancel
IP address: User name:	Namber of data logging setting: 1 Namber of event logging setting: 0 Namber of report setting: 0 (Total: 1)

2 Click the Edit button.

0

٠

 $\mathbf{\nabla}$

•

000000000000000000000000

4

V

Broject Edit Online Icol		
G ADBIDLS6	Logging type/File format Sampling Data T63331 Number of logging lines CSV output. Save Finish	
Data logging setting Event logging setting Report setting Common setting	Make settings for higger conditions.	
a ag contaitonty	O Single condition Compound condition 	
	Tiger be	
	OR combine	
	Trigger is generated when any of the conditions holds true.	
	AND combine Trices is constitute hold tas.	
	O Number of times	
	Trigger is generated by monitoring the number of times a condition has held true.	
	O Order	
	Trigger is generated by monitoing the order in which a condition has held true.	
	- List of conditions	
	No. Type Content	
	2	
	3	
	4	
	6	
	7	
	Edt Dates 4	a na
	Edit Delete	
	Setting a period of time No cetting	
	Specify a period of time during which to carry out trigger monitoring.	
	S Back Next > Finish (an
	Data list Caller	an
	Number of data logging setting: 1 Number of event logging setting: 0 Number of report setting	
IP address: User name:		

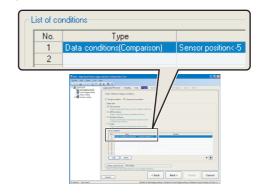
The <u>OR combine (No.1)</u> dialog box for specifying conditions is displayed.

3 Specify the first trigger condition.

Enter data as shown in the screen below.

	a conditions					
Del	ine conditions	under which da	ta was used.			
0	Ocmparis					
	As a result		or data-to-cons	1.1.1		
	003:Senso	Data name	Condi	ions Data/C	Constant 🗸	Data name/Constant value
_	1003.56/60	rposition	∖ لسا ⊠	Constant		-0
0		of change of				
	When a sp	ecified data valu	e changes, a gi	en condition hol	ds true.	
		Data name				
			×			
	,					
~						
	ed cycle		nd] (1-86400)			
		[Seco ue in a fixed cyc	nd] (1-86400)			
Cor O Tim	ndition holds to the interval sp	ue in a fixed cyc ecification	nd] (1-86400) le. Every			
Cor O Tim	ndition holds to the interval sp	ue in a fixed cyc ecification	nd] (1-86400) le.			
Cor O Tim Cor	ndition holds to the interval sp	ecification when the just	nd] (1-86400) le. Every			
Cor O Tim Cor O Spe	ndition holds tr ne interval sp ndition holds tr acifying a tim	ecification when the just	nd) (1-86400) le. Every : time is crossed.			
Cor O Tim Cor O Spe	ndition holds tr ne interval sp ndition holds tr acifying a tim	ue in a fixed cyc ecification ue when the just e of day	nd) (1-86400) le. Every : time is crossed.	Minute	Secon	4
Cor O Tim Cor O Spe	ndition holds to ne interval sp ndition holds to activing a tim ndition holds to	ue in a fixed cyc ecification ue when the just e of day ue at a fixed time	nd] (1-86400) le. Every time is crossed. a of the day.			4
Cor Cor Cor Cor Cor	ndition holds to ne interval sp ndition holds to activing a tim ndition holds to	ue in a fixed cyc ecification ue when the just e of day ue at a fixed time Day	nd] (1-86400) le. Every time is crossed. a of the day.			9
Con O Tim Con O Spe Con Con	dition holds to be interval sp dition holds to ecifying a tim dition holds to Month tartup of mo	ue in a fixed cyc ecification ue when the just e of day ue at a fixed time Day	nd] (1-86400) le. Every time is crossed. a of the day. Hour			9
Con O Tim Con O Spe Con Con	dition holds to be interval sp dition holds to ecifying a tim dition holds to Month tartup of mo	ue in a fixed cyc ecification ue when the just e of day ue at a fixed time Day	nd] (1-86400) le. Every time is crossed. a of the day. Hour			d DK Can

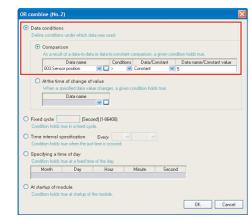
The specified condition is added to the list of conditions.



the state button. • • 68 8.0 setting rent logging sport setting Edk Delete ***** Settin of time No settin < Back Next > Cancel Data list

Select the second line in the list of conditions, and click

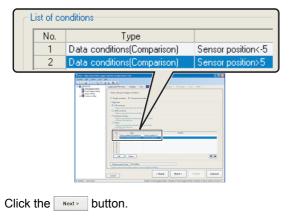
Specify the second trigger condition. Enter data as shown in the screen below.



Click the ____ button.



The specified condition is added to the list of conditions.



0 0 0 0 0 ۰ ۰ • ō • • ٠ ٥ • V 6 • • 0 0 • • • • 0 ۰ ۰ 0 0

•

•

۰

•

ō

0

 $\mathbf{\nabla}$

7

•

•

•

0

•

•

ō

0

•

•

•

ō

•

 $\mathbf{\nabla}$ 8

0 V

5

STEP 1-7 Set the number of logging lines

1 Enter "100" for "Before trigger", and "100" for "After trigger".

 Log data before an Log data before trip 		
Before trigger After trigger Total number of lines	100	Line] (0-65534) Line] (1-65535) Line] (1-65535)
Concernence Concernen	And a fee two of higgeringing ignitingers in tion, which is non-observation holds true, and alterninger and (2000)	

2 Click the Next > button.

۰

0 0 0

•

٠

۰

0

0

0

۰

•

0 •

٠ 0

 $\mathbf{\nabla}$

•

0

V

STEP 1-8 Configure the CSV output settings

Use the default settings for the CSV output settings. •

Bootect Edit Graines Icol	
DB10L96 Data logging setting Event logging setting Papati setting Papati setting	Logging type/File format. Sampling Data Trigger Number of logging lines CSV output Save Finish Define the contents of output to CSV/Res.
in 📫 Common setting	Duite column Output date column Output index column
	Carry out the logging with a time stamp attached to data. Index numbers for checking the centrally of logging Bpscily date format
	Data name line string Data line supprisonmet
	Example of surput
	Tigger information column Output tigger information column Diata line on which a tigger cocurred in logged after attached with a note.
	Data neme line string Tegge When tigger condition rives
	When trigger condition falls
	Sack Next > Finish Can

1 Click the Next > button.

STEP 1-9 Configure the save settings

0

•

•

۰

٥

•

•

0

۰

۰

• ō

0

•

0

0

0

0

•

V

• 0 •

• ۰ •

ō 0

•

۰

۰

0

0

•

٠

•

V

1 Enter "Trigger_LOG" for the file save destination.

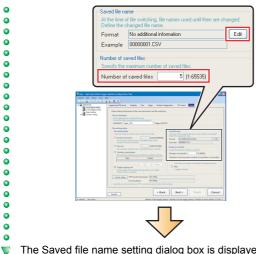


A folder with the name specified above is created on the CompactFlash card.

2 Select "Trigger logging unit" for the file switching timing.

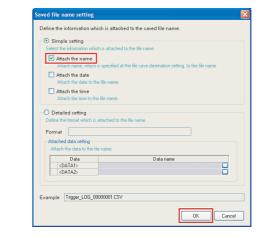
	👔 🗱 🛱 Logging type/File format - Sampling - Data - Trigger - Number of Ic	opping lines CSV output Save Finish
Even Kopping setting Even Kopping setting Papert setting Common setting	Make settings frait pertain to file save destination and file switching File save destination Data by a solid seguritized set of the formed Data by a solid seguritized set of the following files: 2.006/NEV Tripper_UCG	
	File witching tetring	Saved lie core
	Define the tining on which to racke a switch to new files.	At the time of the switching, the names used until then are changed. Define the changed the name.
	O Number of records [Line] (100-69535)	Format No additional information Edit
	File switching is effected when a specified number of lines (number of necessir) is reached.	Example 00000001.CSV
	File size [88] [10-16384] File xvidding is effected when a specified file size is seached Orandition specification	Number of seved Bez Specify the mechanism manager of seved Res. Number of seved Res. 1 (189935)
	File solidaring is effected when the following conditions held true. Type Context Differences and the following conditions Cubic Context Cubic Context	Operation occurring when number of saved files is exceeds Operawite Files with lower numbers are deleted and logping continues. O Blog Logping is stopped.
	Transfer setting FTP transfer destination No setting E-mail address No setting	
	Saved files can be transferred over FTP or sent by e-mail at the time of file	switching

3 Enter "5" for the number of saved files and click the Edit button.



The Saved file name setting dialog box is displayed.

4 Check "Attach the name" and click the _____ button.



5 Click the Next> button.



0

•

•

0

0

ō

٠

٠

• •

0

2

•

٠

0

•

•

•

0

0

0

٠

٠

٠ •

•

•

0

0 0

õ

٠ 0

•

0

0 ۰

•

0

•

٠

٠

• 0

0

0

٠

0 0

٥

•

•

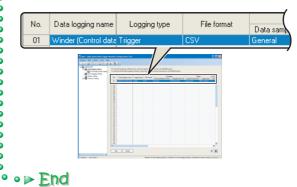
 $\mathbf{\nabla}$

STEP 1-10 Enter the data logging name

1 Enter "Winder (Control data)" for the data logging name.



The configured settings are added to the data logging setting list.



CASE .

STEP 2 Write settings

Write the data logging settings configured in STEP 1 to the high speed data logger module.

Select [Online] \rightarrow [Transfer Setup].	I Select [Online] \rightarrow [Write].
Project Edit Tool Halp Image: Constraint of the second secon	Image: Second state of the second s
	2 Click the ves button.
The <u>Transfer Setup</u> dialog box is displayed. Select "Direct connection" and click the <u>Connection test</u> button.	High Speed Data Logger Module Configuration Tool Writing onto High Speed Data Logger Module will be carried out. Do you want to continue? <attention> All the settings present in the High Speed Data Logger Module will be discarded Yes It could be the settings Click the Yes button.</attention>
Connection via hub IP address of connection target IP address Find High Speed Data Logger Module on network Direct connection Access authentication Connection in much hupperif time automatematication	High Speed Data Logger Madule Configuration Tool Writing is successfully completed. Do you want to update settings and have the new settings reflected immediately in the operation of t module? * Network settings are reflected after the resetting of PLC CPU. * Network settings are reflected after the resetting of PLC CPU. * OK button.
Connection is made by specifying a user name and password User name Password Connection test OK Cancel	High Speed Data Logger Module Configuration Tool
Click the or button. High Speed Data Logger Module Configuration Tool Succeeded in establishing the connection.	 The data logging settings are written to the CompactFinistalled on the high speed data logger module. The data logging function starts immediately after the written because the CPU mode was set to 'RUN' at Prese (F) Activating the system (P. 6)). End

• $\mathbf{\nabla}$

STEP 3 Graphical display of data

Display logged data in graphs using GX LogViewer.

STEP 3-1 Start GX LogViewer

Start GX LogViewer from the High Speed Data Logger Module Configuration Tool.

1 Select [Tool] \rightarrow [Start GX LogViewer].

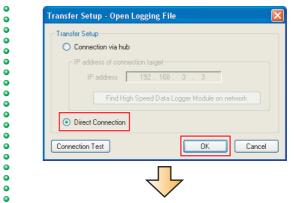




Specify the data to be displayed



2 Select "Direct Connection" and click the _____ button.



The Logging File dialog box is displayed. V

0

۰ ۰

•

0

• •

٠

•

3 Double-click each folder in the following order: "Trigger_LOG" → "00000001".

Logging File	- Ethernet d	irect conne	tion			
Directory	/LOGGING					Move
Up	one level				<u>R</u> efresh	
Nama		Size		Date Mo	dified	
🗀 Trigger_L	.0G			9/10/201	0 2:31 PM	4
Open File	.)				Г	Close
k the	Refresh		button	when	the	folder
	rionosii		bullon	which	uic	loidei

4 Select the displayed CSV file and click the _____ button.

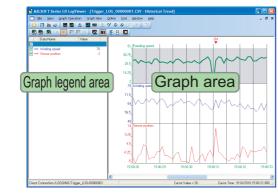
Directory /LOGGING/Trigger_	LOG/0000001	Mo
Up one level		<u>R</u> efresh
Name	Size	Date Modified
Trigger_LOG_0000001.CSV	7367	9/10/2010 2:42 PM
Open File		Clos
		0.00

A list of data names and graphs are displayed behind the Assistant screen.



5 Click the close button on the Assistant screen.

The data specified as target data in the data logging settings are displayed in the graph legend area and the graph area.



0 Note that in this guide, the background color was changed to 0 white in graph properties ([Graph View] \rightarrow [Graph Properties]). • Colors of graph lines can be also changed in graph 0 properties.

STEP 3-3 Display multiple cursors

1 Select [Graph View] → [Multiple Cursor].

•

•

•

•

0

٥

0

•

•

۰

•

•

•

•

٠

٥

•

ō

•

•

۰

۰

٠

0

•

•

۰

V

•

۰

0

0

•

٠ ٠

•

• ō

0

0

0 0 0

•

•

•

0

•

ō

•

•

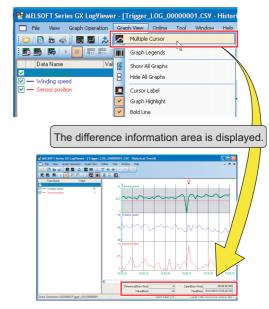
0

0

•

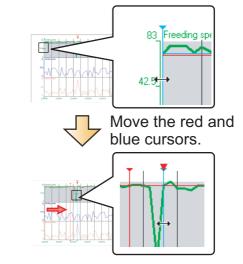
•

•



STEP 3-4 Check data using the cursors

I Select a graph. Move the red and blue cursors, located at the left edge of the graph, to the desired positions and check their respective values.



For an easier operation, select "Move Red Cursor Here" or "Move Blue Cursor Here" from the menu displayed by rightclicking on a graph area.

٠ •

0

0

0

٠

0

ō

ō

0

0

0

0

0

0

0

•

0

•

ō

0

•

0

0

•

0

•

•

۰ 0

• •

0 ۰ •

0

0

0 0

0

0

0

•

V

0

0

•

•

•

•

0

0

0

0

0

ō

0

0

۰

•

•

0

U

- 2 Check the cursor details displayed in the difference information area.
- The elapsed time and the value difference between the two • cursors (blue to red) are displayed.

In addition, the value and time of each cursor's position are also displayed.

•

•

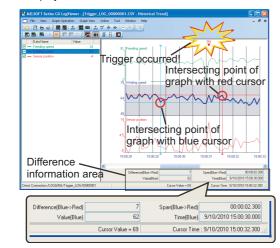
V

•

•

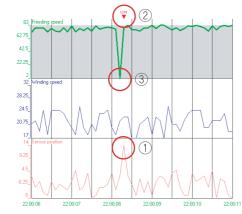
ō

ō



${\it 3}$ Analyze the cause of error from the graphs

- The sensor position rose rapidly (1), and a trigger occurred (2).
- The feeding speed drastically decreased (③) immediately before the rise in sensor position, and thus, this could have caused the trigger.



Errors are primarily diagnosed by checking the data before and after the trigger occurrence.



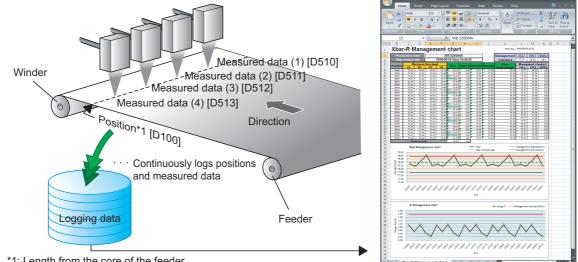
Creating reports from continuously logged data CASE 2

This section explains 'continuous logging function' and 'report creation' using Xbar-R management chart as an example.

Figure

The thickness of the film (measured data) is measured at four points, and recorded in the report named Xbar-R management chart (Excel format).

(Production item: MB-5Z6004K [D502])



*1: Length from the core of the feeder.

Data logging settings

Target data	:	Position [D100 (Double word [signed])],
		Measured data (1) [D510 (Word [signed])], Measured data (2) [D511 (Word [signed])],
		Measured data (3) [D512 (Word [signed])], Measured data (4) [D513 (Word [signed])]
Data sampling interval	:	2 seconds
Saved file format	:	Binary file

Report settings

Report output data	:	Target data, production item [D502 (String)], creation time
Number of logging lines in a report	:	25
Report creation period	:	50 seconds

Operation flow

STEP 1: Data logging settings (Continuous logging)



Configure the data logging settings using High Speed Data Logger Module Configuration Tool. STEP 2: Report settings



Configure the report settings using High Speed Data Logger Module Configuration Tool.

STEP 3: Write settings



Write the data logging settings and report settings configured in STEP 1 and 2 to the high speed data logger module.

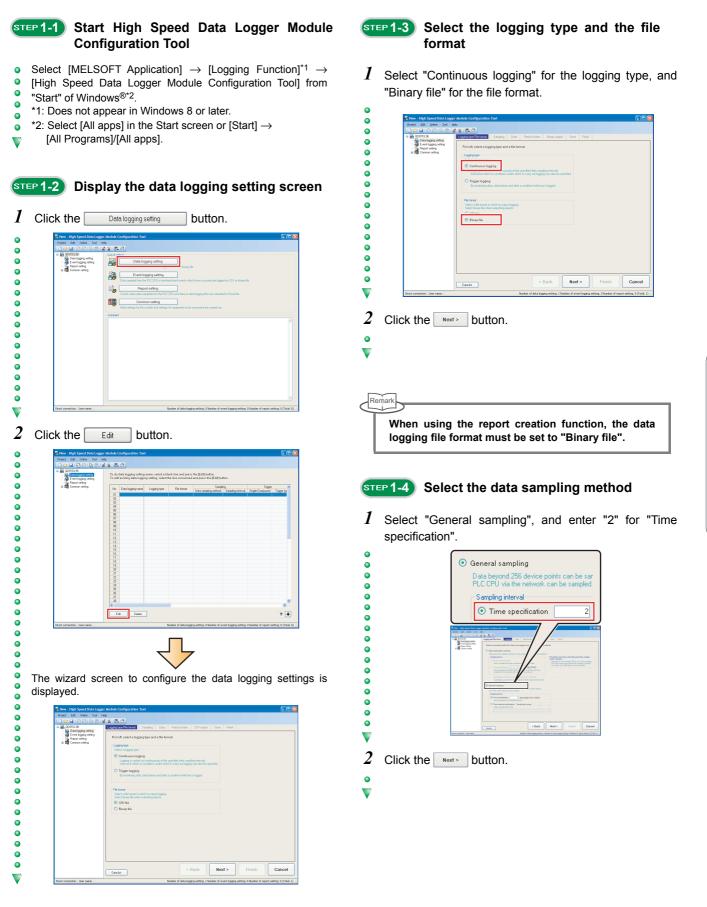




Check the report file created on the CompactFlash card of the high speed data logging module on Excel.

STEP Data logging settings (Continuous logging)

Configure the settings to log the programmable controller CPU data at the specified data sampling interval.



STEP 1-5 Set the target data

To set the target data, specify devices individually, or specify consecutive devices in batch.

1 Enter the target data. (Individual)

0

•

0

•

ō ٠ ۰

0 •

• 0 0

۰ 0 • • • 0

•

0 •

0

V

•

•

•

•

0

•

0

0 0

0

0 0

0 0

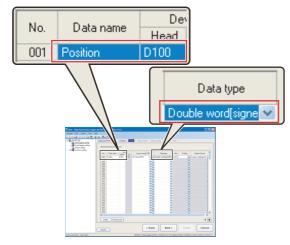
• •

•

V

• ٥

Enter data as shown in the screen below. 0 0



Default values are automatically displayed for "Device" (Last), "Access target CPU", "Data type", and "Output Format".

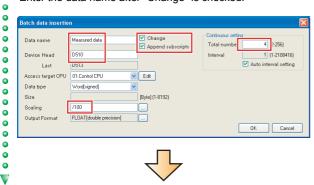
2 Click the Batchinset button. (Batch)

Set the consecutive devices in batch.

Is: Decame The set of the set o	Speci	fy data to be lo	gged.						
	No.	Data name			Access target CPL		Data type	Size Scaing	Output Format
		Position	D100	D101		- 🗆 Di	suble word[signed] 🐱		
						× 🔾 🗌	~		2
							~	0	3
						× 🗆	~	0	5
							*	0	2
						- C	×.	0	3
						Image: Contract of the second seco	×.	0	3
									3
							Y		3
							Y		3
							Y		3
							Y		2
							Y		2
							Y)
							×		2
							×		2
						× 🖵	~		_
									1
						× 🖵	~		1
							~		1
							~		
							×		4
							×		4
						× L	×		1
	De	lete Batc	h incert						
Delete Batch inset	Data is				< 6	Back	Next >	Finis	h Car

The Batch data insertion dialog box is displayed.

- 3 Enter the information regarding the target data, and click the <u>k</u> button.
 - Specify data as shown in the screen below.
 - Enter the data name after "Change" is checked.



The specified data are added to the list. •

No.	Data name		evice	Access t	arget CPU	Data type
		Head	Last		-	
001	Position	D100	D101	01:Control CPL		Double word[sig
002	Measured data[1]		D510	01:Control CPL		Word[signed]
003	Measured data[2]		D511	01:Control CPL		Word[signed]
004	Measured data[3]		D512	01:Control CPL		Word[signed]
005	Measured data[4]	D513	D513	01:Control CPL	J 🛛 🔽 🛄	Word[signed]
		amant deg (10) 991 heart deg (10) 991 heart deg (10) 991 heart deg (10) 991 heart deg (10) 991	C Carel (9) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0	000000000000000000000000000000000000000	a a a a a a a a a a a a a a a a a a a	

STEP 1-6 Set the logging period

 Use the default settings for the logging period 	od.
---	-----

Data logging cating	K K K L2 Logging type / File format Sampling I	Data Period of time Binary output Save Finish
Data logging setting Event logging setting Report setting Common setting	Define period during which to carry o Need not be defined if logging is set to tai	nt logging. Ke place at all times. Press the [Next] button.
	Specify a period of time	
	No. Type of condition	Content
	2 3	
	4 5 6	
	8	
	Edk Delete	Operator for combination 🛛 👻 🛊
	L	
	Data int	< Back Next > Finish

- Click the Next > button.
- V

STEP 1-7 Configure the binary output settings

Use the default settings for the binary output settings.

DD810L96 D0810L96 D081069ping setting Event logging setting Propost setting event logging setting Common setting	Logging type File format Sampley Data Period drave Encars output Define the contents of data to be outputted to binary files.
	Clear electromico Copy of the logge grant times area affacted to data. Copy of the logge grant times area affacted to data. O in secondad electronic dout area. Orado accondade affacted out area. Orado accondade affacted out area.
	Output the title in nonconcid as well as in noroscit follow follo
	Togge information Deals logged that stached with larg information on a location where we give accounts Output logger flag
	Data int Car



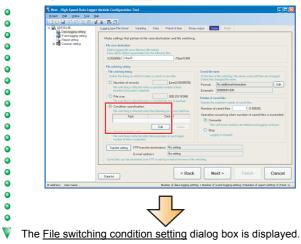
STEP 1-8 Configure the save settings

1 Enter "Xbar-R" for the file save destination.



A folder with the name specified above is created on the
 CompactFlash card.

2 Select "Condition specification" for the file switching timing, and click the **Edit** button.



3 Select "Fixed cycle", enter "50", and click the button.

• • 0 0 0 ō 0 • ۰ • 0 • 0 ۰ • ō • $\mathbf{\nabla}$

•

0 0 0

0 0

•

õ

0

•

۰

•

0

•

0

۰

•

ō

•

•

0 0 0

0

0

0

۰

•

0

•

٠

٠

•

0

V

6

•

 ∇

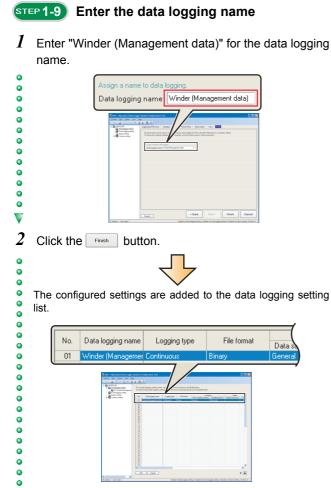
Single conditio				
	nditions anditions under which data w	have		
	mparison a result of a data-to-data or :			N
As	Data name	Conditions	Data/Constant	Data name/Constant va
			Datarconstant	Data nalite/curistant va
• Fixed cyc		hanges, a given co e 🗖	ndition holds true.	
Fixed gat Time inter Condition	Data name De 50 jecondj cycle. erval specification E holds true when the just tim	(1-86400)	ndition holds true.	
Fixed ov Time inter Condition Specifyin	Data name	(1-86400) ivery		
Fixed ov Time inter Condition Specifyin	Data name Data name le 50 iecond) iecond i	(1-86400) Every		×

4 Enter "5" for the number of saved files and click the Edit button.

Format	No additional information Edit
Example	00000001.BIN
Number of sa	aved files
Specify the	maximum number of saved files.
Number of	f saved files 5 -65535)
A concurrence of the concurrence	
Padres (server)	Ount Stank Kent > Finish Cancel Looke of dashages unless 1 looke of ever lagge unless 1 looke of ever lagg

- The <u>Saved file name setting</u> dialog box is displayed.
- 5 Check "Attach the name" and click the use button.

Define the information which is atta	ached to the saved file name.
 Simple setting 	
Select the information which is attack	hed to the file name
Attach the name	d at the file save destination setting, to the file name.
	o at the ne save destination setting, to the ne name.
Attach the date	
	B.
Attach the time	
Attach the time to the file name	£
O Detailed setting	
Define the format which is attached t	to the file name
Format	
Attached data setting	
Attach the data to the file name.	
Data	Data name
<data1></data1>	
<data2></data2>	
Example Xbar-R_00000001.BIN	
	ОК



• • ► End

Operation of the high speed data logger module

STEP 2 **Report settings**

STEP 2-1 Display the report setting screen

Configure the settings to create a report (Excel format) using data sampled by the high speed data logger module.

•

٦

V

				CASE2.dlp - High Speed Data Broject Edit Opline Tool B	elp	_	tion Tool			
Controlling to the figure of the set of			Image: Contract of the contra	GD81DL96 Gate logging setting	To do	report setting ane	w, select a blank line and press t	ve (Edil) button. nd mean the (Edil) button		
21	22 23 24 24 25 25 26 26 26 26 26 26 26 26 26 26	22 23 24 24 25 25 26 26 26 26 26 26 26 26 26 26	2 de la case da la la gar den a la case da la la case da		01 02 03 04 06 06 07 07 08 08 09 10 08 08 09 10 11 11 12 13 14 15 16 7 18 19 9 21	Report name	Seculary Data sangling method Secular	printerval Lapout file scien	Develop to Single/Compound	spor Taggertype File some

Next >

Car

•

• ۰

0 0 0

•

۰

۰

0

V

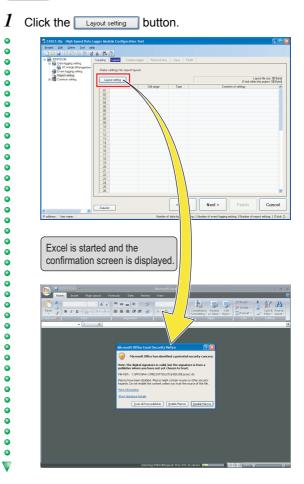
Data list

STEP 2-2 Select the data sampling method

Use the default settings for the data sampling method.

Coreco intro	Baches Baches Baches Dates Dates Congel Security S	alla sampling ta sampling and noni ble, medi campled each time a semilication din accordance will accordance will accordance will accordance will accordance will be accordance will accordance will be accordance will be accordance accordance will be accordance accordance will be accordance accordance will be accordance ac	toing synchronous requerce scenning Milliocond wat angenera to a specified the in insecutive series is of devices helps the sampled. Data 1 [Second [J] ed riternal.	with sequence is made ((1.42767) nering cycles i fervial of devices reduce load i tom ofter stat	e scenning ere inposed forh	 Only data on as OPU that support 	nging unterval.	an be campled.
kiress: User name:	Data list			< Bao	*	Next >	Finish	Cancel

STEP 2-3 Display the "Layout setting" screen



CASE 2

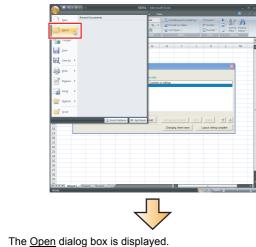
21



The <u>Layout setting</u> dialog box is displayed.

STEP 2-4 Load a layout file

In this guide, the layout is set by using the provided layout file (l08147eng-layout_a.xls). ($\overbrace{\colored off}^{\colored off}$ Preparation (P. 5)) Copy the layout sheet to the sheet used for layout setting.



2 Select the acquired "I08147eng-layout_a.xls" file and click the _____ button.

٠

٠

•

•

•

•

•

٠

0

•

•

•

•

•

•

•

•

0

0

0

0

•

0

0

0

0

0

•

0000

٠

0 0

•

•

•

0

•

0

0

٠

•

0

0

•

٠

•

٠

•

0

0 0

•

0 0

۰

0

0

•

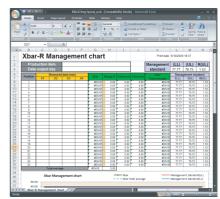
٠

0 0

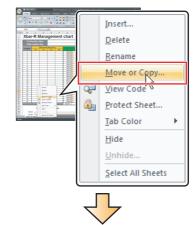
V

Look in:	🛅 108147en	g-data_a				~	٢	- 📫	×
My Recent Documents	106147eng								
🚱 Desktop	- Incomments	403000-0							
C My Documents									
My Computer									
My Network Places									
	File name:							100	
	File pame: Files of type:	All Excel Files						* *	
Took •		All Excel Files	;				Qpe		

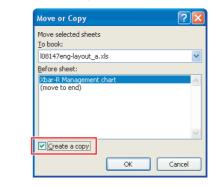
The "Xbar-R Management chart" sheet is displayed with tables and graphs.



3 Right-click on the sheet tab and select "Move or Copy".



- The Move or Copy dialog box is displayed.
- 4 Check "Create a copy".



0

•

0

0

•

•

0

0

•

0

0

0

•

0

ō

•

0

٠

•

•

0

U

	Move or Copy
ĕ	Move selected sheets To book:
•	l08147eng-layout_a.xls
•	1/2000 book QD81DL9620090610143641703.xls
•	III/814/eng-layout_a.xis
•	<u></u>
•	
ō	Create a copy
-	OK Cancel
6	Select "Sheet1" from the list of "Before sheet", and click
	the 🔜 button.
•	Move or Copy
•	Move selected sheets
•	To book: QD81DL9620090610143641703.xls
•	Before sheet:
•	Sheet1
ŏ	(move to end)
•	
•	Create a copy
•	OK Cancel
•	
•	\prec
ŏ	The "Xbar-R Management chart" sheet is copied to the file
•	
•	"REP01" on which the layout settings are configured.
•	"REP01" on which the layout settings are configured.
- - -	
•	
•	Operation Operation <t< th=""></t<>
•	Angelande frankensensensensensensensensensensensensense
•	Angelande frankensensensensensensensensensensensensense
•	Angelande frankensensensensensensensensensensensensense
	Angelande frankensensensensensensensensensensensensense
	Non-R Management And Imagement And Imagement And
	Non-Rf Management chart Price Price Voir Status Price Price Price Voir Status Price Price Price
	Image: Constrained and the second s
	Image: set of the set of th
	Image: Constrained and the second s
	Image: Constrained and the second s
	<image/>
	<image/>
	<image/>

Select "QD81DL96YYYYMMDDxls" from the list of

5

"To book".

properly.

STEP 2-5 Specify the production item

0

٥

V

•

•

Designate a cell in the report file to display the production item code (current data stored in D502).

1 Select "Current value" for "Adding a new layout", and click the Add button.

Specify and add a layor No. Sheet name	Cell range	Style	Contents of	settings	_		
Adding a new lays		_					
C Data logging	Current value	C Creation tim	Add	Adding reproduction	Edit	Delete	1
_				Changing sheet name	L	ayout setting	comp

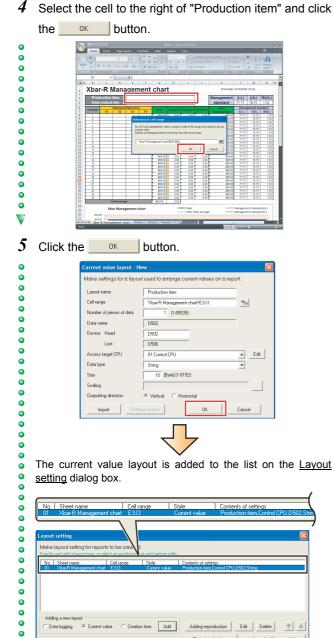
- The Current value layout dialog box is displayed.
- 2 Specify the data for "Production item" (except for the cell range).
 - Enter data as shown in the screen below.

Make settings for a layo	ut used to arrange current values on a report.
Layout name	Production item
Cell range	Xbar-R Management chart1D25
Number of pieces of data	1 (1-65535)
Data name	D502
Device Head	D502
Last	D506
Access target CPU	01:Control CPU - Ed
Data type	String
Size	10 [Byte] (1-8192)
Scaling	
Outputting direction	Vertical C Horizontal
Import Rele	ase relation OK Cancel

3 Click the selection of cell range) button.

Make settings for a layo	ut used to arrange current values on a report.
Layout name	Production item
Cell range	Xbar-R Management chart"1D25
Number of pieces of data	1 (1-65535)
Data name	D502
Device Head	D502
Last	D506
Access target CPU	01:Control CPU Edit
Data type	String
Size	10 [Byte] (1-8192)
Scaling	
Outputting direction	Vertical C Horizontal
Import	ase relation OK Cancel

The <u>Selection of cell range</u> dialog box is displayed.



STEP 2-6 Specify the data output day

0

•

٠ •

0

۰

۰

٥

0

ō

•

٠

•

0

0

۰

0

V

•

٠

٠

۰

0 0 0

0

•

•

•

•

0 •

ō

٠

٠ ۰ • • • ٠

Changing sheet name Layout setting complete

Designate a cell in the report file to display the report creation time.

1 Select "Creation time" and click the Add button.

No. Sheet name 01 Xbar-R Management cha	Cell range	Style Current value	Contents of settings Production item Control CPU D502.String
Adding a new layout			_
C Data logging C Current	value 🛈 Creati	on time Add	Adding reproduction Edit Delete
			Changing sheet name Layout setting

٠ The Creation time layout dialog box is displayed. V

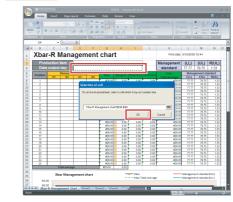
2 Enter "Data output day" for the layout name.

Make settings	for a layout used to arrange creation	on time on a report.
Layout name	Data output day	
Cell	Xbar-R Management chart1E3	**

3 Click the selection of cell) button.

Creation time la Make settings fo	r a layout used to arrange creation time on a	report.
Layout name Cell	Date output day %Dar-R Management charTE3 DK	Cance
	$\overline{\mathbf{V}}$	

- V The Selection of cell dialog box is displayed.
- 4 Select the cell to the right of "Data output day" and click ок button. the



V

4



Cli	ick the	ок	button				
		Creation time I	ayout - New -				
		Make settings	for a layout used to arra	inge creation time	on a report.		
		Lavout name	Data output day		_		
		Cell	Xbar-R Management ch	art'IE 4			
				OK.	Ca	incel	
			ſ				
			\prec	4			
				\checkmark			
The	e creat	tion time	a layout is	added to	the lis	t on th	e Lavo
		alog box.	•				<u> </u>
0011	<u>ing</u> aic	liog box.					
							(
<u>No.</u>		ame Management cha	Cell range art E3:13	Style Current value		of settings n item.Control	CPU.D502
02		lanagement cha		Creation time	Data outp		
_							
Layou	it setting						
		ng for reports to b					
Specif	y and add a lay		existing layout and perform e range Style	Contents of settin			
01	Xbar-R Mana	agement chart E3:1 agement chart E4		Production item,0	Control CPU,D502	String	
Ļ				e ene ompan døy			
-	fan a nam l						
	ding a new layo.)ata logging	C Current value	Creation time Add	Adding repro	duction Edi	it Delete	★
				Changing s	heet name	Layout setting	complete
				changing s	iou nume	monoil setting	comprose

STEP 2-7 Specify the logging data

Designate the cells labelled 'position' and 'measured data' in the report file to display the logging data (D100, D510 to D513).

1	Select "Data logging" and click the	Add	button.
٠	Layout setting		

No.	Sheet name	Cell range	Style	Contents of settings
01	Xbar-R Management chart Xbar-R Management chart	E3:13 E4	Current value Creation time	Production item,Control CPU,D502,String Data output day
	- Abar Fridar agement en at		creation one	bota otapor day
	at a second s			
• D	ata logging C Current val	lue C Creation	time Add	Adding reproduction Edit Delete 🛧
				Changing sheet name Layout setting complete
			$\overline{1}$	7

The Data logging layout dialog box is displayed.

- 2 Specify the data used for data logging (except for the leading cell and output data).
- Enter data as shown in the screen below. • 0

•

0

٠

• • 0

0

 $\mathbf{\nabla}$

•

0

0 •

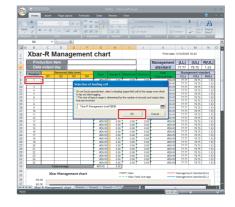
ō

	g for outputting data logging file record to each re	
Layout name	Management data	Sheet name:
Leading cell	Xbar-R Management chart1E4 36	Cell range:
Number of records	25	
Data logging name	01:Winder (Management data)	Edit
Source file	C (Saved file) Output the data in the file which	h has stored
	C Storing file Output the data in the file which	
	Both Output the data in the both file:	
0	Vertical (top > bottom) C Horizontal (left > r	110
Outputting direction		
Outputting order	 Chronological order (old -> new) C Reverse in 	chronological order (new -> old)
Output data	Select data names to be outputted and add them to the	e output data
	Logging data	Output data
	No. Data name Contents	No. Data name Contents
	INDEX Index TIME Logging output date 001 Position D100[Double world; 002 Messured data[] D510[FL0AT[double 003 Messured data] D511[FL0AT[double 004 Messured data] D512[FL0AT[double 005 Messured data] D513[FL0AT[double	4

3 Click the solution of leading cell) button.

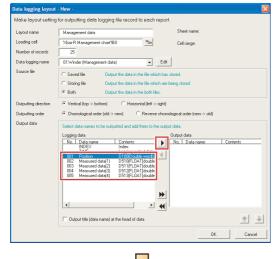
,	for outputting data logging file record to each report	
Layout name	Management data	Sheet name:
Leading cell	Xbar-R Management chart1E4	Cell range:
Number of records	25	
Data logging name	01:Winder (Management data)	
Source file	Storing file Output the data in the file which has: Storing file Output the data in the file which are to Both Output the data in the both files.	
Outputting direction		
Outputting order	Chronological order (old -> new) C Reverse chronological	logical order (new -> old)
	Na. Data nome Content: INDE Index INDE Loogra output des OPErion OPErion OPERION	Na Data name Contents
	Culput title (data name) at the head of data	DK Cancel

- The Selection of leading cell dialog box is displayed.
- 4 Select the cell under "Position" and click the ΟK button.



5 Select the logging data from No. 001 to 005 one by one and click) (repeat the operation for each data).

Add the logging data No. 001 to 005 to the field of "Output ۰ • data".





6 Click the _____ button on the Data logging layout dialog box.



The data logging layout is added to the list on the Layout setting dialog box.

No. Sheet name	Cell range	Style	Contents of settings
01 Xbar-R Management chart 02 Xbar-R Management chart	E3:13 E4	Current value Creation time	Production item,Control CPU,D502,String Data output day
03 Xbar-R Management chart	88:F32	Data logging	Management data, Winder (Management data), Both, V
ayout setting			
Make layout setting for reports			V
for the second second		1 C C C C C C C C C C C C C C C C C C C	v.
	Cell range	Style	Contents of settings
01 Xbar-R Management chart 02 Xbar-R Management chart	E3:13 E4	Current value	Production item, Control CPU, D502, String
02 Xbar-R Management chart 03 Xbar-R Management chart		Creation time Data locging	Data output day Management data,Winder (Management data),Both,Vertic
oo naanninanaganan anar	00.102	D did logging	nanogenerik dola, w noer (nanogenerik dala), ben, vere
1			
4			
Adding a new layout			
Data logging Current value	e C Creatio	n time Add	Adding reproduction Edit Delete 1
		- Hud	
			Changing sheet name Lavout setting com

STEP 2-8 Finish the layout settings

1 Click the Layout setting complete button.

•

•

0 0 0

0

0

•

0

•

•

•

0

•

0

0

0

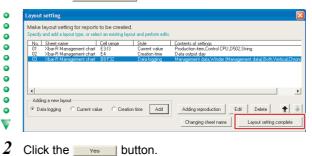
•

V

3

•

V



2	eed Data Logger Module Configuration Tool Excel layout setting process is finished. Do you want to save your settings? When you save and ext, cell values allocating layout setting are cleared.
	[Yes]: Save and close. [No]: Discard and close. [Cancel]: Do not close.
	Yes No Cancel

Three layout settings are added to the layout setting list.

No.	Sheet name	Cell range	Тур	e			Contents
01	Xbar-R Management ch	E3:13	Current v	alue	Production ite	em,Control CF	PU,D502,S
02	Xbar-R Management ch	E4	Creation	time	Data output o	lay	
03	Xbar-R Management ch	B8:F32	Data logg	jing	Management	data,Winder	(Manage
			Tope Construction Construction (Construction Construction (Construction (Construction))) in the Paralaction state (Construction) (Constructi				
	Palites Denser	0 mill	< Back Next >		Cancel		

Click the Next > button.

•

•

•

•

•

0

0

٥

•

0

•

•

۰

•

0

0

۰

0 0 0

•

•

۰

•

0

•

٠

۰ 0

0 •

•

۰

0

 $\mathbf{\nabla}$

0

۰

0 ŏ

٠

0

Click the	Edit button.
Broject Edit Onlin	
 By Dombuse By Controlsory By Event Roya By Event R	strenger server server server Serv
D address Use rans	Starting Cancel Notes Finish Cancel Notes Hadre of Acad Segreg uniting of Notes of Acades of Acades of Acades and Acades (1) (2) (2) Index of Acades (1) (2) (2)
The <u>Trigge</u>	r condition setting dialog box is displayed.
Select "F	ixed cycle", enter "50", and click the 💷
button.	
0 0	pr condition setting Data conditions Data conditions Data conditions
	Compartison As a result of a data-to-data or data-to-constant comparison, a given condition holds true.
	Data name Conditions Data name/Constant value At the time of change of value
	When a specified data value changes, a given condition holds true. Data name
• F	Fixed cycle 50 [Second] (1+86400)
	Time interval specification Condition holds towe when the just time is crossed
	Concluden holds two at a lixed time of the day. Month Day Hour Minute Second
	It startup of module Canditon holds true at startup of the module.
	It the time of the data logging life is switched when the file of the specification logging setting is witched, the condition turns true.
	Carcel
	ed condition is applied to the wizard screen.
Excase 2. dip - High Broket Edit Gele	
Broject Edit Only	Symposit Model Generginandias Taud Image: Statute Image: Statute Image: Statute
CASE2.dlp - High Protect Edit gate Concert Edit gate Concert Edit gate Concert Edit	Specifical Legger Module Carlingworthin Taol.
CASE2.dlp - High Protect Edit gate Concert Edit gate Concert Edit gate Concert Edit	Symped thotal segars shadeds Configurations Tool Configurations Confi
CASE2.dlp - High Protect Edit gate Concert Edit gate Concert Edit gate Concert Edit	Symped thotal segars shadeds Configurations Tool Configurations Confi
CASE2.dlp - High Protect Edit gate Concert Edit gate Concert Edit gate Concert Edit	Symped thotal segars shadeds Configurations Tool Configurations Confi
CASE2.dlp - High Protect Edit gate Concert Edit gate Concert Edit gate Concert Edit	Symped thotal segars shadeds Configurations Tool Configurations Confi
CASE2.dlp - High Protect Edit gate Concert Edit gate Concert Edit gate Concert Edit	Symped thirds alonger skindek Configuration Tool Configuration Conf

STEP 2-10 Set the report creation periods

• Use the default settings for the report creation periods.

Broject Edit Online Icol	94
😑 🚟 QD81DL96 🛞 🌄 Data logging setting	Sampling Layout Creation tigger Period of Enviro
Report setting Common setting	Period of time for which to execute report creation is specified. Need not be defined if setting in such as to create specified at all free. Press the (Need button
	Specify a period of time
	Carry out report creation during the period of time which corresponds to prescribed conditions
	O Don't carry out report creation during the period of time which corresponds to prescribed conditions
	No. Type of condition Content
	2
	3 4
	5 8
	7 8
	Edit Delate Operator for combination 💉 🛊
	Stack Next > Finish Car

- 1 Click the Next> button.
- •

▼ 2

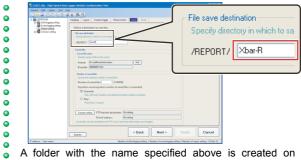
•

•

0 0 0

STEP 2-11 Configure the save settings

1 Enter "Xbar-R" for the file save destination.



A folder with the name specified above is created on the CompactFlash card.

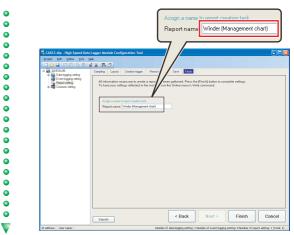
Enter "5" for the number of saved files and click the

- <complex-block>
- The <u>Saved file name setting</u> dialog box is displayed.

3	Check "Attach the name" and click the	outton.
•	Saved file name setting	
0 0 0 0 0 0	Define the information which is attached to the saved file name. Simple setting Select the information which is attached to the file name. Attach the name Attach the date Attach the date to the file name. Attach the date to the file name. Attach the time the file name.	
	Attach the stime to me have. O Dataled cetting Define the format which is attached to the file name. Format Attach the data to the file name. Attach the data to the file name.	
0 0 0	Data Data name ObtAtAt> ObtAtAt> ObtAtAt> ObtAtAt> ObtAtAt>	
•	Example MarrA_0000001XLS	
4	Click the vert button.	
•		

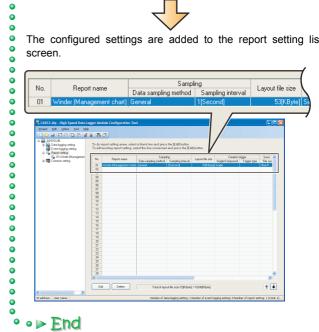
STEP 2-12 Enter the report name

1 Enter "Winder (Management chart)" for the report name.



2 Click the Finish button.

The configured settings are added to the report setting list screen.

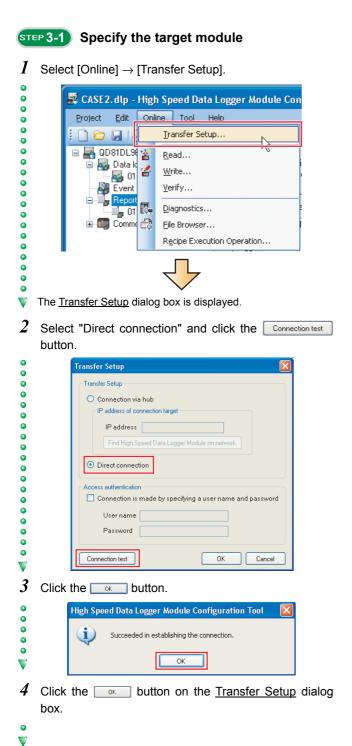


Operation of the high speed data logger module

V

STEP 3 Write settings

Write the data logging and report settings configured in STEP 1 and 2 to the high speed data logger module.



- STEP 3-2 Write the settings
- 1 Select [Online] \rightarrow [Write].

•	
•	CASE2.dlp - High Speed Data Logger Module Con Project Edit Online Tool Help
•	i Commo Politica Poli
ŏ	🖃 🚟 QD81DL9 🗽 Read
0	🗃 🛃 Data I 🌃 Write
ŏ	Event Verify
0	Diagnostics
ŏ	🗄 💷 Comm 😂 File Browser
	Recipe Execution Operation
2	Click the ves button.
•	
ŏ	High Speed Data Logger Module Configuration Tool
•	Writing onto High Speed Data Logger Module will be carried out. Do you want to continue?
ŏ	
•	All the settings present in the High Speed Data Logger Module will be discarded.
Υ.	<u>Y</u> es <u>N</u> o
3	Click the Yes button.
•	High Speed Data Logger Module Configuration Tool
0	Writing is successfully completed. Do you want to update settings and have the new settings reflected immediately in the operation of the
0	module? * Network settings are reflected after the resetting of PLC CPU.
-	 Wetwork settings are reneated a dream resetting on PLC GPU.
Υ.	
4	Click the button.
•	High Speed Data Logger Module Configuration Tool 🛛 🔀
0	
•	Updating of the settings is completed.
0	OK
0	
•	The data logging and report settings are written to
ŏ	CompactFlash card installed on the high speed data lo
•	module

CompactFlash card installed on the high speed data logger module. The data logging function and the report creation start immediately after the data are written because the CPU mode was set to 'RUN'

at Preparation. (Activating the system (P. 6))



٠

0

•

•

0

the

STEP 4 Checking created report

Use Excel to check the report created in STEP 3.

зτ	EP 4	-1

•

•

0

0

0

•

0

•

0

0

0

0

0

0

0

0

0

•

•

•

•

•

0

0

0

•

0

0

0

0

•

0

•

0

•

 $\mathbf{\nabla}$

0

۰

0

•

•

0

0

•

•

0

0

0

٠

0

0

•

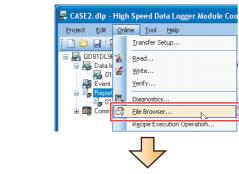
•

0

V

Save the report file to a personal computer

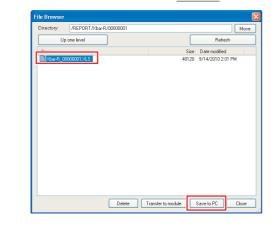
1 Select [Online] \rightarrow [File Browser].



- The File Browser dialog box is displayed.
- 2 Double-click each folder in the following order: "REPORT" → "Xbar-R" → "00000001".

Directory:	/					Mov
U	lp one level				Refresh	
Name				Size	Date modified	
EVENT					9/14/2010 7:00 At	
					9/14/2010 2:00 Pt	
BEPORT					9/14/2010 2:00 Pt	
STRIEM	1				9/14/2010 2:00 Pt	м
		Delete	Transfer to mo	dule	Save to PC	Close

- displayed in the list.
- 3 Select the XLS file and click the Save to PC button.



4 Specify the save destination (option) on the <u>Save As</u> dialog box, and click the <u>Save</u> button.

Save in:	C Report		~ () 🗊 📂	····-
					_
My Recent					
Documents					
Desktop					
My Documents					
my blocamonto					
My Computer					
	L				
	File name:	Xbar-R_00000001		*	

5 Click the Deefe button on the <u>File Browser</u> dialog box.

STEP 4-2 Check the report on EXCEL

•

0 0

٠

0

0

٠

0

•

•

0

•

٠

٠

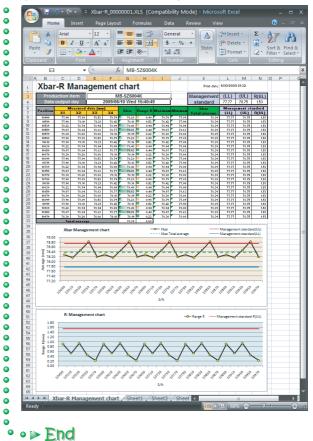
•

0

U

not

- *1* Open the XLS file saved in a personal computer.
- 2 Check that the logged data are applied to the table and graphs on the "Xbar-R Management chart" sheet.





This concludes the Quick Start Guide on the high speed data logger module.

The high speed data logger module supports a number of functions in addition to the logging function and report function introduced in this guide.

For details on the functions, refer to the following manual:

F High Speed Data Logger Module User's Manual SH-080818ENG

Excel, Windows, Windows Vista, and Windows XP are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

The company names, system names and product names mentioned in this manual are either registered trademarks or trademarks of their respective companies.

In some cases, trademark symbols such as '™' or '®' are not specified in this manual.

Precautions for Choosing the Products

This publication explains the typical features and functions of the Q Series programmable controllers and does not provide restrictions and other information on usage and module combinations. When using the products, always read the user's manuals of the products.

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; opportunity loss or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

🚹 For safe use

- To use the products given in this publication properly, always read the "manuals" before starting to use them.
- The products have been manufactured as general-purpose parts for general industries, and have not been designed or manufactured to be incorporated in a device or system used in purposes related to human life.
- Before using the products for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.
- The products have been manufactured under strict quality control. However, when installing the products where major accidents or losses could occur if the products fail, install appropriate backup or failsafe functions in the system.

MEMO		

Programmable Controller High Speed Data Logger Module

Country/Region	Sales office	Tel/Fax
USA	MITSUBISHI ELECTRIC AUTOMATION, INC. 500 Corporate Woods Parkway, Vernon Hills, IL 60061, U.S.A.	Tel : +1-847-478-2100 Fax : +1-847-478-2253
Mexico	MITSUBISHI ELECTRIC AUTOMATION, INC. Mexico Branch Mariano Escobedo #69, Col. Zona Industrial, Tlalnepantla Edo. Mexico, C.P.54030	Tel : +52-55-3067-7500
Brazil	MITSUBISHI ELECTRIC DO BRASIL COMÉRCIO E SERVIÇOS LTDA. Avenida Adelino Cardana, 293, 21 andar, Bethaville, Barueri SP, Brazil	Tel : +55-11-4689-3000 Fax : +55-11-4689-3016
Germany	MITSUBISHI ELECTRIC EUROPE B.V. German Branch Mitsubishi-Electric-Platz 1, 40882 Ratingen, Germany	Tel : +49-2102-486-0 Fax : +49-2102-486-1120
UK	MITSUBISHI ELECTRIC EUROPE B.V. UK Branch Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, U.K.	Tel : +44-1707-28-8780 Fax : +44-1707-27-8695
Ireland	MITSUBISHI ELECTRIC EUROPE B.V. Irish Branch Westgate Business Park, Ballymount, Dublin 24, Ireland	Tel : +353-1-4198800 Fax : +353-1-4198890
Italy	MITSUBISHI ELECTRIC EUROPE B.V. Italian Branch Centro Direzionale Colleoni-Palazzo Sirio Viale Colleoni 7, 20864 Agrate Brianza(Milano) Italy	Tel : +39-039-60531 Fax : +39-039-6053-312
Spain	MITSUBISHI ELECTRIC EUROPE, B.V. Spanish Branch Carretera de Rubí, 76-80-Apdo. 420, 08190 Sant Cugat del Vallés (Barcelona), Spain	Tel : +34-935-65-3131 Fax : +34-935-89-1579
France	MITSUBISHI ELECTRIC EUROPE B.V. French Branch 25, Boulevard des Bouvets, 92741 Nanterre Cedex, France	Tel : +33-1-55-68-55-68 Fax : +33-1-55-68-57-57
Czech Republic	MITSUBISHI ELECTRIC EUROPE B.V. Czech Branch Avenir Business Park, Radlicka 751/113e, 158 00 Praha5, Czech Republic	Tel : +420-251-551-470 Fax : +420-251-551-471
Poland	MITSUBISHI ELECTRIC EUROPE B.V. Polish Branch ul. Krakowska 50, 32-083 Balice, Poland	Tel : +48-12-347-65-00 Fax : +48-12-630-47-01
Sweden	MITSUBISHI ELECTRIC EUROPE B.V. (Scandinavia) Fjelievägen 8, SE-22736 Lund, Sweden	Tel : +46-8-625-10-00 Fax : +46-46-39-70-18
Russia	MITSUBISHI ELECTRIC (RUSSIA) LLC St. Petersburg Branch Piskarevsky pr. 2, bld 2, lit "Sch", BC "Benua", office 720; 195027 St. Petersburg, Russia	Tel : +7-812-633-3497 Fax : +7-812-633-3499
Turkey	MITSUBISHI ELECTRIC TURKEY A.Ş Ümraniye Branch Serifali Mah. Kale Sok. No:41 34775 Umraniye - Istanbul, Turkey	Tel : +90-216-969-2500 Fax : +90-216-526-3995
UAE	MITSUBISHI ELECTRIC EUROPE B.V. Dubai Branch Dubai Silicon Oasis, P.O.BOX 341241, Dubai, U.A.E.	Tel : +971-4-3724716 Fax : +971-4-3724721
South Africa	ADROIT TECHNOLOGIES 20 Waterford Office Park, 189 Witkoppen Road, Fourways, South Africa	Tel : +27-11-658-8100 Fax : +27-11-658-8101
China	MITSUBISHI ELECTRIC AUTOMATION (CHINA) LTD. No.1386 Hongqiao Road, Mitsubishi Electric Automation Center, Shanghai, China	Tel : +86-21-2322-3030 Fax : +86-21-2322-3000
Taiwan	SETSUYO ENTERPRISE CO., LTD. 6F, No.105, Wugong 3rd Road, Wugu District, New Taipei City 24889, Taiwan	Tel : +886-2-2299-2499 Fax : +886-2-2299-2509
Korea	MITSUBISHI ELECTRIC AUTOMATION KOREA CO., LTD. 7F-9F, Gangseo Hangang Xi-tower A, 401, Yangcheon-ro, Gangseo-Gu, Seoul 07528, Korea	Tel : +82-2-3660-9530 Fax : +82-2-3664-8372
Singapore	MITSUBISHI ELECTRIC ASIA PTE. LTD. 307, Alexandra Road, Mitsubishi Electric Building, Singapore 159943	Tel : +65-6473-2308 Fax : +65-6476-7439
Thailand	MITSUBISHI ELECTRIC FACTORY AUTOMATION (THAILAND) CO., LTD. 12th Floor, SV.City Building, Office Tower 1, No. 896/19 and 20 Rama 3 Road, Kwaeng Bangpongpang, Khet Yannawa, Bangkok 10120, Thailand	Tel : +66-2682-6522 Fax : +66-2682-6020
Vietnam	MITSUBISHI ELECTRIC VIETNAM COMPANY LIMITED Hanoi Branch 6th Floor, Detech Tower, 8 Ton That Thuyet Street, My Dinh 2 Ward, Nam Tu Liem District, Hanoi, Vietnam	Tel : +84-4-3937-8075 Fax : +84-4-3937-8076
Malaysia	MITSUBISHI ELECTRIC SALES MALAYSIA SDN. BHD. Lot 11, Jalan 219, 46100 Petaling Jaya, Selangor Darul Ehsan, Malaysia	Tel : +60-3-7626-5000 Fax : +60-3-7658-3544
Indonesia	PT. MITSUBISHI ELECTRIC INDONESIA Gedung Jaya 11th Floor, JL. MH. Thamrin No.12, Jakarta Pusat 10340, Indonesia	Tel : +62-21-3192-6461 Fax : +62-21-3192-3942
India	MITSUBISHI ELECTRIC INDIA PVT. LTD. Pune Branch Emerald House, EL-3, J Block, M.I.D.C., Bhosari, Pune-411026, Maharashtra, India	Tel : +91-20-2710-2000 Fax : +91-20-2710-2100
Australia	MITSUBISHI ELECTRIC AUSTRALIA PTY. LTD. 348 Victoria Road, P.O. Box 11, Rydalmere, N.S.W 2116, Australia	Tel : +61-2-9684-7777 Fax : +61-2-9684-7245

MITSUBISHI ELECTRIC CORPORATION

HEAD OFFICE: TOKYO BUILDING, 2-7-3, MARUNOUCHI, CHIYODA-KU, TOKYO 100-8310, JAPAN NAGOYA WORKS: 1-14, YADA-MINAMI 5, HIGASHI-KU, NAGOYA, JAPAN