WEB-ENABLED
REMOTE TERMINAL UNIT
Model: DL30GCFG

USERS MANUAL
(CSV FILE FORMAT)

Table of Contents

1. INTRODUCTION

Thank you for choosing us.
Before use, check the following information.

1.1 Corresponding Versions

■ **DL30GCFG CONFIGURATOR SOFTWARE VERSION**

This Users Manual corresponds to model DL30GCFG version 3.0 or later.
The DL30GCFG version can be confirmed as follows.

(1) Click (or right click) at the top left of the initial window.

(2) Click [About DL30GCFG ...] to display the version information dialog.
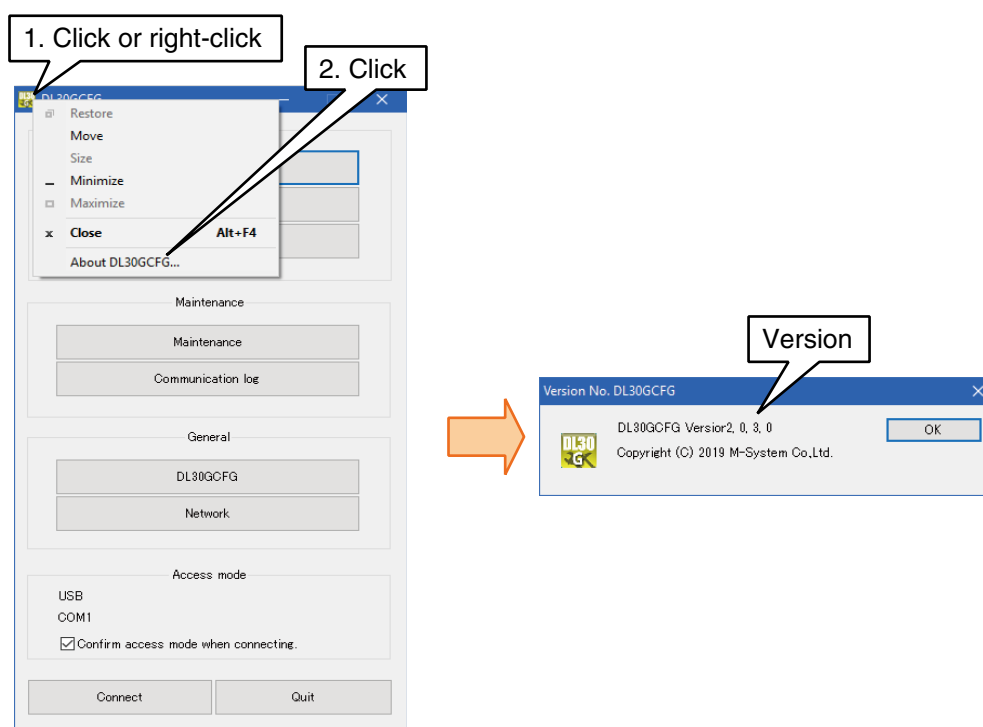
This manual describes the format when saving the setting data configured by the DL30GCFG as csv file.
Refer to the DL30-G users manual (EM-8571-G) for details.

2. CSV FILE TYPE

2.1 CSV File Type

CSV file means a file describes the separation of the data with "," and end of the data with "line break (CR+LF)".

However, following data are exception.
1. When a "," is in one data, enclose whole data with """ (double quotation).
   (e.g. 123,456 -> "123,456")
2. When a """ (double quotation) is in one data, dounle the """ and enclose whole data with """ (double quotation.
   (e.g.1 AB"CD -> "AB""CD")
   (e.g.2 "AB"CD" -> """AB""CD""")
3. When a "line break (CR+LF)" is in one data, enclose whole data with """ (double quotation).
   e.g. 1   "1
       2 -> 2
       3   3"

Note
""" (double quotation) enclosing whole data are not displayed when open the CSV file by Microsoft Excel.

2.2 Save as CSV

Describes how to save the setting data configured by DL30GCFG as CSV file.
1. Click "Save the CSV file"
2. Put the check mark to the data to save as CSV and click OK.
   Click "Select all" to put the check for all items in the frame.
   When some of items are checked, click "Select all" to uncheck all items.
3. Select the folder to save CSV and click OK to save the file to the file path shown to the "Folder (F):"
   Overwrite the file if the file of same name is in the folder.
   Refer to the "table 1 list of the save data and file name" for corresponding of the file data and file name.
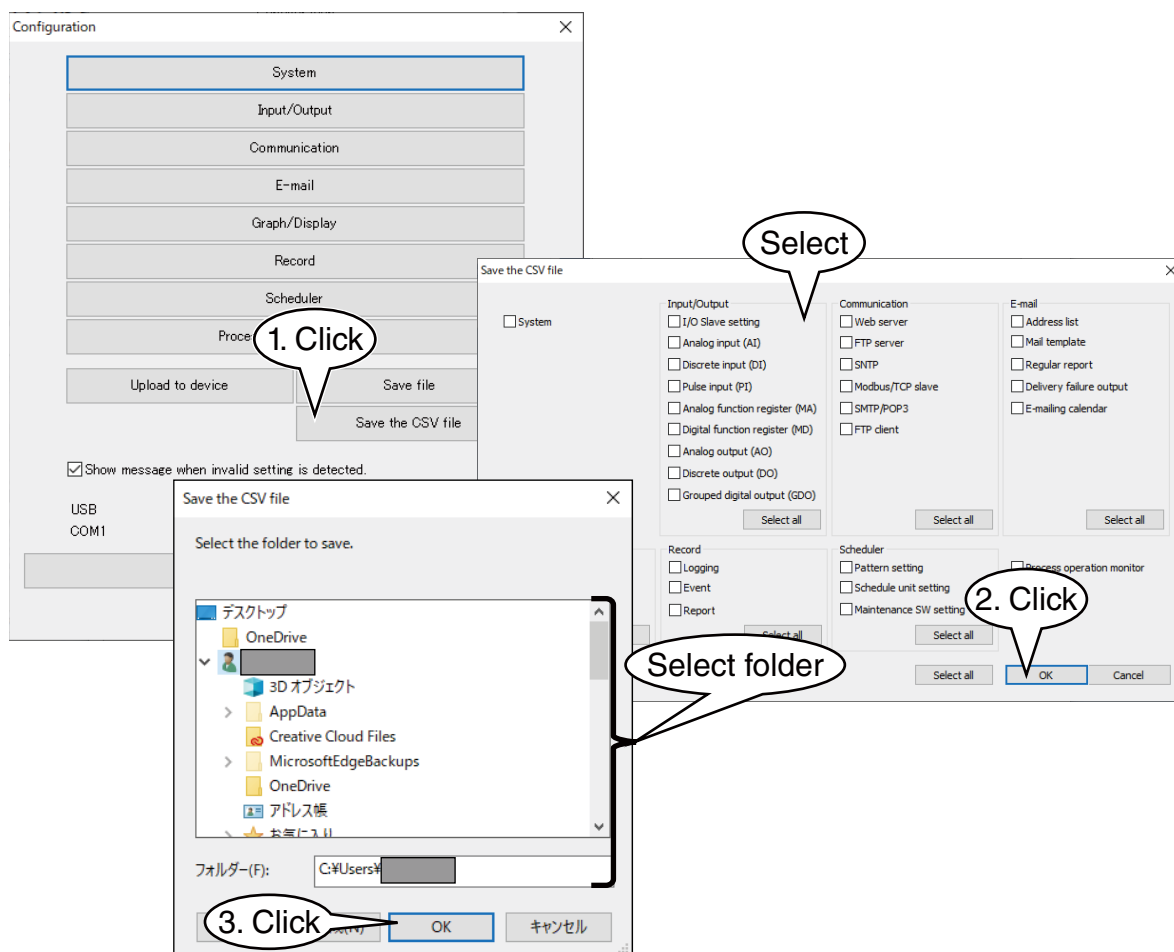
Table 1.   List of the Save Data and File Name

SAVE DATA		FILE NAME	DESCRIPTION
System	—	System.csv	3.1 System
Input/Output	I/O Slave setting	NODE.csv	3.2.1 Slave Setting
	AI	AI.csv	3.2.2 Analog Input (AI) Setting
	DI	DI.csv	3.2.3 Discrete Input (DI) Setting
	PI	PI.csv	3.2.4 Pulse Input (PI) Setting
	MA	MA.csv	3.2.5 Analog Function Register (MA) Setting
	MD	MD.csv	3.2.6 Digital Function Register (MD) Setting
	AO	AO.csv	3.2.7 Analog Output (AO) Setting
	DO	DO.csv	3.2.8 Discrete Output (DO) Setting
	GDO	GDO.csv	3.2.9 Grouped Digital Output (GDO) Setting
Communication	WEB server	WEB.csv	3.3.1 WEB
	FTP server	FTPS.csv	3.3.2 FTP Server
	SNTP	SNTP.csv	3.3.3 SNTP
	Modbus/TCP slave	MODBUS_TCP.csv	3.3.4 Modbus/TCP Slave
	SMTP·POP3	SMTP_POP3.csv	3.3.5 SMTP/POP3
	FTP client	FTPC.csv	3.3.6 FTP Client
E-mail	Address list	MailAddr.csv	3.4.1 Address List
	Mail template	Form.csv	3.4.2 Mail Template
	Regular report	Time.csv	3.4.3 Regular Report
	Delivery failure output	Error.csv	3.4.4 Delivery Failure Output
	E-mailing calendar	Calender.csv	3.4.5 E-mailing Calendar
Graph/Display	Trend	Trend.csv	3.5.1 Trend
	Data	Data.csv	3.5.2 Data
Record	Logging	Logging.csv	3.6.1 Logging
	Event	Event.csv	3.6.2 Event
	Report	Report.csv	3.6.3 Report
Scheduler	Pattern setting	Pattern.csv	3.7.1 Pattern Setting
	Schedule unit setting	Unit.csv	3.7.2 Schedule Unit Setting
	Maintenance SW setting	Mainte.csv	3.7.3 Maintenance SW Setting
Process operation monitor	—	Opemon.csv	3.8 Process Operation Monitor

3. CSV FILE FORMAT

Outputs setting items as columns and setting data as rows to a CSV file.
Setting item name and setting data are same as DL30GCFG. Exceptions are described in each section.

E.g. Saved as following when saving maintenance SW setting to the CSV.

Converts to CSV file.

File name: Mainte.csv

```
CH, Type,DI
,CH,5
```

Example when opening
the file with Microsoft Excel
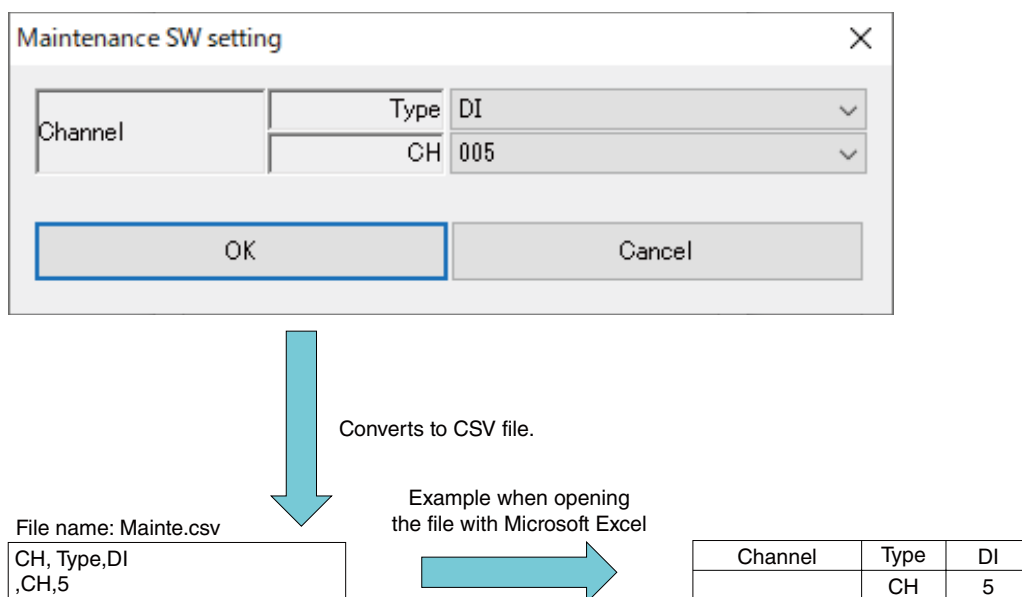
Channel	Type	DI
	CH	5

Each item have level (item 1 to 4) and shown as following.

1st column Item 1	2st column Item2
Channel	Type
– (blank)	CH

These lines are not saved in CSV

Shows the list and details of each item from here on.

Caution Converts the data configured by the DL30GCFG to the CSV file , so error check is not performed.

3.1 System

Outputs setting parameters as columns and each setting data as rows.

E.g. System.csv

```
Name,,M-System co.,Ltd
Timezone,Hour,9
,Minute,8
Sampling adjustment at time correction,,Enable
Language,,Japanese
```

File name: System.csv
Setting is same as DL30CFG "System". Details are as following list.

Table 2. System

1st column Item 1	2nd column Item 2	3rd column Item 3
Name	– (blank)	32 characters
Timezone	Hour	Integer -12 to 13
–	Minute	Ineger 0 to 59
Sampling adjustment at time correction	–	"Enable", "Disable"
Language	–	"Japanese", "English"

3.2 Input/Output

Outputs setting parameters as columns and setting data of each channel and each slave No. as rows.

E.g. NODE.csv

```
Pause period (100 to 10000 ms),,100
Modbus/TCP Timeout (1 - 10 s),,5
Modbus/TCP transaction ID management,, Enable
SLMP Timeout (1 - 60 s),,1
,,Slave 0,Slave 1,...,Slave 31,
Slave type,,Modbus/TCP,SLMP,...,192.168.10.15,
Port address,,502,502,...,502,
Communication error output,type,MD,DO,...,None,
...
```

E.g. AI.csv

```
,,,CH1,CH2,...,CH256,
CH setting,,,Module,Modbus/TCP, ...,Disable,
,Slot No,,1,,...,,
,Module address,,2,,...,,
,Slave No,,,5,...,,
...
```

3.2.1 Slave Setting

File name: NODE.csv
Setting is same as DL30GCFG [Input/Output] -> [Slave]. Details are as following list.

Table 3. Slave Setting

1st column Item 1	2nd column Item 2	3rd column Setting data	Remarks
Pause period (100 - 10000 ms)	– (blank)	Integer 100 to 10000	
Modbus/TCP Timeout (1 - 10 s)	–	Integer 1 to 10	
Modbus/TCP transaction ID management	–	Enable / Disable	
SLMP Timeout (1 - 60 s)	–	Integer 1 to 60	
1st column Item 1	2nd column Item 2	3rd to 66th columns Setting data	Remarks
–	–	Slave 0 to slave 63	
Slave type	–	"Modbus/TCP", "SLMP"	
IP address	–	IPv4	
Port address	–	Integer 0 to 65535	
Communication error output	Type	"None", "MD", "DO", "GDO"	
–	CH	Integer, CH No. corresponding to the type	Blank when "None" is selected for type in communication error input.
Modbus/TCP	Node No.	Integer 0 to 255	Configurable when "Modbus/TCP" is selected for slave type.
–	Connection sharing	"Disable", "Slave 0" to "Slave 31"	
SLMP	Network No.	Integer 0 to 255	Configurable when "SLMP" is selected for slave type.
–	Station No.	Integer 1 to 255	
–	Processor No. hexadeciamal	Integer (hexadecimal) 0 to 0xffff	

3.2.2 Analog Input (AI) Setting

File name: AI.csv
Setting is same as DL30GCFG [Input/Output] -> [Analog Input (AI)]. Details are as following list.

Table 4. Analog input (AI)

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns Setting data	Remarks
– (blank)	–	–	(CH No.) AI1 to AI128	
CH setting	–	–	"Disable", "I/O module", "Modbus/TCP", "SLMP", "Control input", "Time", "Demo (sine wave)", "Demo (square wave)"	Following all items are blank when "Disable" is selected.
–	Module address	–	Integer 1 to 16	Configurable when "I/O module" is selected for CH setting.
–	CH No.	–	Integer 1 to 4	
–	Slave No.	–	Integer 0 to 63	Configurable when "Modbus/TCP" or "SLMP" is selected for CH setting.
–	Modbus/TCP register type	–	"Input Register (3X)", "Holding Register (4X)"	Configurable when "Modbus/TCP" is selected for CH setting.
–	Modbus TCP register address	–	Integer 1 to 65536	
–	SLMP device	–	Refer to Table 6: Analog input (AI) SLMP Device	Configurable when "SLMP" is selected for CH setting.
–	SLMP device No. (Decimal)	–	Integer 0 to 4294967295	Configurable when "SLMP" is selected for CH setting and "SLMP device" is supported. Refer to Table 6: Analog input (AI) SLMP device
–	SLMP device No. (Hexadecimal)	–	Integer (hexadecimal) 0 to 0xffffffff	
–	Time input	–	"Month", "Day", "Hour", "Minute", "Second", "Day of week"	Configurable when "Time" is selected for CH setting.
CH name	–	–	16 characters	
CH comment	–	–	16 characters	
Data type	–	–	"% (0 - 10000)", "Int (integer)", "Uint (unsigned integer)"	Configurable when other than "Time" is selected for CH setting.
Filter	–	–	"None", "Moving average", "Delay buffer"	Configurable when other than "Time" is selected for CH setting.
–	Moving average samples	–	"4", "8", "16", "32", "64"	Configurable when other than "Time" is selected for CH setting and "Moving average" is selected for filter.
–	Time constant	–	Integer 0 to 100	Configurable when other than "Time" is selected for CH setting and "Delay buffer" is selected for filter.
Scaling	0%	–	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when other than "Time" is selected for CH setting and other than "% (0 - 10000)" is selected for data type
–	100%	–		

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns Setting data	Remarks
–	Int	–	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when other than "Time" is selected for CH setting and other than "% (0 - 10000)" is selected for data type
Number of deciaml places	–	–	"0", "1", "2", "3"	Configurable when other than "Time" is selected for CH setting.
Engineering unit	–	–	8 characters	
Alarm zone setting	–	–		Continues to Table 5: Analog data zone setting.

Setting is same as DL30GCFG [Input/Output] -> [Analog Input (AI)] -> [Zone setting].
Details are as following list.

Table 5. Analog data zone setting

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns (5th to 260th columns for MA) Setting data	Remarks
Partitions	– (blank)	–	"Disable", "2", "3", "4", "5"	Configurable when other than "Disable" is selected for CH setting. Following all items are blank when "Disable" is selected for partition.
Zone 5	Basic	Lower limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5" is selected for partitions.
–	–	Name	32 characters	
–	–	Color	RGB (integer, hexadecimal) 0 to 0x00ffffff	
–	–	Alarm output (MD) 1 - 32	Integer (hexadecimal) bit, OFF when 0, ON when 1	
–	–	Alarm output (MD) 33 - 64		
–	–	Alarm output (MD) 65 - 96		
–	–	Alarm output (MD) 97 - 128		
–	–	Alarm output (MD) 129 - 160		
–	–	Alarm output (MD) 161 - 192		
–	–	Alarm output (MD) 193 - 224		
–	–	Alarm output (MD) 225 - 256		
–	–	Alarm output (GDO) 1 - 32	Integer (hexadecimal) bit, OFF when 0, ON when 1	
–	–	Alarm output (DO) 1 - 32	Integer (hexadecimal) bit, OFF when 0, ON when 1	
–	–	Alarm output (DO) 33 - 64		
–	–	Alarm output (DO) 65 - 96		
–	–	Alarm output (DO) 97 - 128		
–	–	Reset totalized value (PI) 1 - 32	Integer (hexadecimal) bit, OFF when 0, ON when 1	
–	–	Reset totalized value (PI) 33 - 64		
–	–	Reset totalized value (PI) 65 - 96		
–	–	Reset totalized value (PI) 97 - 128		
–	–	Reset function value (MA) 1 - 32	Integer (hexadecimal) bit, OFF when 0, ON when 1	
–	–	Reset function value (MA) 33 - 64		
–	–	Reset function value (MA) 65 - 96		
–	–	Reset function value (MA) 97 - 128		
–	–	Reset function value (MA) 129 - 160		
–	–	Reset function value (MA) 161 - 192		
–	–	Reset function value (MA) 193 - 224		
–	–	Reset function value (MA) 225 - 256		
–	Upward	Event log	"Enable", "Disable"	
–	–	Message	32 characters	
–	–	Event No.	Integer 1 to 64	
–	–	Mail template No. 1 - 32	Integer (hexadecimal) bit disable when 0, mail when 1	
–	–	Mail template No. 33 - 64		
–	–	Mail template No. 65 - 96		
–	–	Mail template No. 97 - 128		

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns (5th to 260th columns for MA) Setting data	Remarks
Zone 4	Basic	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5" is selected for partitions.
–	–	Lower limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5" or "4" is selected for partitions.
–	–	The following is omitted, as it is the same as zone 5 "Name" and after.	The following is omitted, as it is the same as zone 5 "Name" and after.	
–	–	...	...	
–	Upward	Omitted, as it is the same as zone 5	Omitted, as it is the same as zone 5	Configurable when "5" or "4" is selected for partitions.
–	–	...	...	
–	Downward	Event log	"Enable", "Disable"	Configurable when "5", is selected for partitions.
–	–	Message	32 characters	
–	–	Event No.	Integer 1 to 64	
–	–	Mail template No. 1 - 32	Integer (hexadecimal) bit disable when 0, mail when 1	
–	–	Mail template No. 33 - 64		
–	–	Mail template No. 65 - 96		
–	–	Mail template No. 97 - 128		
Zone 3	Basic	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5" or "4" is selected for partitions.
–	–	Lower limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5", "4" or "3" is selected for partitions.
–	–	The following is omitted, as it is the same as zone 5 "Name" and after.	The following is omitted, as it is the same as zone 5 "Name" and after.	
–	–	...	...	
–	Upward	Omitted, as it is the same as zone 5	Omitted, as it is the same as zone 5	Configurable when "5", "4" or "3" is selected for partitions.
–	–	...	...	
–	Downward	Omitted, as it is the same as zone 4	Omitted, as it is the same as zone 4	Configurable when "5" or "4" is selected for partitions.
–	–	...	...	
Zone 2	Basic	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5", "4" or "3" is selected for partitions.
–	–	Lower limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5", "4" "3" or "2" is selected for partitions.
–	–	The following is omitted, as it is the same as zone 5 "Name" and after.	The following is omitted, as it is the same as zone 5 "Name" and after.	
–	–	...	...	
–	Upward	Omitted, as it is the same as zone 5	Omitted, as it is the same as zone 5	Configurable when "5", "4" "3" or "2" is selected for partitions.
–	–	...	...	
–	Downward	Omitted, as it is the same as zone 4	Omitted, as it is the same as zone 5	Configurable when "5", "4" or "3" is selected for partitions.
–	–	...	...	

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns (5th to 260th columns for MA) Setting data	Remarks
Zone 1	Basic	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "5", "4" "3" or "2" is selected for partitions.
–	–	The following is omitted, as it is the same as zone 5 "Name" and after.	The following is omitted, as it is the same as zone 5 "Name" and after.	
–	–	...	...	
–	Downward	Omitted, as it is the same as zone 4	Omitted, as it is the same as zone 4	Configurable when "5", "4" "3" or "2" is selected for partitions.
–	–	...	...	

Table 6. Analog Input (AI) SLMP Device

SLMP DEVICE	SLMP DEVICE NO. (DECIMAL)	SLMP DEVICE NO. (HEXADECIMAL)
00A9H_Special register (SD)	✓	–
00A8H_Data register (D)	✓	–
00B4H_Link register (W)	–	✓
00C2H_Timer current value (TN)	✓	–
00C8H_Retentive timer current value (STN)	✓	–
00C5H_Counter current value (CN)	✓	–
00B5H_Link special register (SW)	–	✓
00CCH_Index register (Z)	✓	–
00AFH_File register (R) Block switching method	✓	–
00B0H_File register (ZR) Serial number access method	–	✓
002CH_Module refresh register (RD)	–	✓
A9H_Special register (SD)	✓	–
A8H_Data register (D)	✓	–
B4H_Link register (W)	–	✓
C2H_Timer current value (TN)	✓	–
C8H_Retentive timer current value (STN)	✓	–
C5H_Counter current value (CN)	✓	–
B5H_Link special register (SW)	–	✓
CCH_Index register (Z)	–	✓
AFH_File register (R) Block switching method	–	✓
B0H_File register (ZR) Serial number access method	–	✓

3.2.3 Discrete Input (DI) Setting

File name: DI.csv

Setting is same as DL30GCFG [Input/Output] -> [Discrete Input]. Details are as following list.

Table 7. Discrete Input (DI)

1st column Item 1	2nd column Item 2	3rd to 258th columns Setting data 3	Remarks
– (blank)	–	(CH No.) DI1 to DI 256	
CH Setting	–	"Disable", "I/O module", "Modbus/TCP", "SLMP", "AI", "Control input", "Demo"	Following all items are blank when "Disable" is selected.
–	Module address	Integer 1 to 16	Configurable when "I/O module" is selected for CH setting.
–	CH No.	Integer 1 to 16	
–	Slave No.	Integer 0 to 63	Configurable when "Modbus/TCP" or "SLMP" is selected for CH setting.
–	Modbus/TCP register type	"Input (1X)", "Coil (0X)"	Configurable when "Modbus/TCP" is selected for CH setting.
–	Modbus/TCP register address	Integer 1 to 65536	
–	SLMP device	Refer to table 9: Discrete Input (DI) SLMP Device	Configurable when "SLMP" is selected for CH setting.
–	SLMP device No. (Decimal)	Integer 0 to 4294967295	Configurable when "SLMP" is selected for CH setting and "SLMP device" is supported. Refer to table9: Discrete Input (DI) SLMP Device
–	SLMP device No. (Hexadecimal)	Integer (hexadecimal) 0 to 0xffffffff	
–	AI CH No.	Integer 1 to 128	Configurable when "AI" is selected for CH setting.
–	AI BIT	Integer 0 to 15	
CH name	–	16 characters	
CH comment	–	16 characters	
Invert	–	"Disable" "Enable"	
Status (ON/OFF)	–		Continues to table 8: Digital Data Status (ON/OFF)

Table 8. Digital data Status (ON/OFF)

1st column Item 1	2nd column Item 2	3rd to 258th columns Setting data 3	Remarks
Status (ON)	Display	8 characters	Following all items are blank when "Disable" is selected for CH Setting.
– (blank)	Color	RGB (integer, hexadecimal) 0 to 0x00ffffff	
–	ON delay time	Integer 0 to 999	
–	Event log	"Enable", "Disable"	
–	Event No.	Integer 1 to 64	
–	Message	32 characters	
–	Reset totalized value (PI) 1 - 32	Integer (hexadecimal), bit, Disable when 0, Reset when 1	
–	Reset totalized value (PI) 33 - 64		
–	Reset totalized value (PI) 65 - 96		
–	Reset totalized value (PI) 96 - 128		
–	Reset function value (MA) 1 - 32	Integer (hexadecimal), bit, Disable when 0, Reset when 1	
–	Reset function value (MA) 33 - 64		
–	Reset function value (MA) 65 - 96		
–	Reset function value (MA) 97 - 128		
–	Reset function value (MA) 129 - 160		
–	Reset function value (MA) 161 - 192		
–	Reset function value (MA) 193 - 224		
–	Reset function value (MA) 225 - 256		
–	Mail template No. 1 - 32	Integer (hexadecimal), bit Invalid when 0, Mail when 1	
–	Mail template No. 33 - 64		
–	Mail template No. 65 - 96		
–	Mail template No. 97 - 128		
Status (OFF)	Omitted, as it is the same as Status (ON)	Omitted, as it is the same as Status (ON)	
	...	...	

Table 9. Discrete Input (DI) SLMP Device

SLMP DEVICE	SLMP DEVICE NO. (DECIMAL)	SLMP DEVICE NO. (HEXADECIMAL)
0091H_Special relay (SM)	✓	–
009CH_Input (X)	–	✓
009DH_Output (Y)	–	✓
0090H_Internal relay (M)	✓	–
0092H_Latch relay (L)	✓	–
0093H_Annunciator (F)	✓	–
0094H_Edge relay (V)	✓	–
00A0H_Link relay (B)	–	✓
00C1H_Timer contact (TS)	✓	–
00C0H_Timer coil (TC)	✓	–
0051H_Long timer contact (LTS)	✓	–
0050H_Long timer coil (LTC)	✓	–
00C7H_Retentive timer contact (STS)	✓	–
00C6H_Retentive timer coil (STC)	✓	–
0059H_Long retentive timer contact (LSTS)	✓	–
0058H_Long retentive timer coil (LSTC)	✓	–
00C4H_Counter contact (CS)	✓	–
00C3H_Counter Coil (CC)	✓	–
0055H_Long cocunter contact (LCS)	✓	–
0054H_Long counter coil (LCC)	✓	–
00A1H_Link special delay (SB)	–	✓
91H_Special relay (SM)	✓	–
9CH_Input (X)	–	✓
9DH_Output (Y)	–	✓
90H_Internal relay (M)	✓	–
92H_Latch relay (L)	✓	–
93H_Annunciator (F)	✓	–
94H_Edge relay (V)	✓	–
A0H_Link relay (B)	–	✓
C1H_Timer contact (TS)	✓	–
C0H_Timer coil (TC)	✓	–
C7H_Retentive timer contact (STS)	✓	–
C6H_Retentive timer coil (STC)	✓	–
C4H_Counter contact (CS)	✓	–
C3H_Counter Coil (CC)	✓	–
A1H_Link special delay (SB)	–	✓
98H_Step relay (S)	✓	–
55H_Long cocunter contact (LCS)	✓	–
54H_Long counter coil (LCC)	✓	–

3.2.4 Pulse Input (PI) Setting

File name: PI.csv
Setting is same as DL30GCFG [Input/Output] -> [Pulse Input]. Details are as following list.

Table 10. Discrete Input (DI)

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns Setting data	Remarks
– (blank)	–		(CH No.) DI1 to DI 256	
CH Setting	–	–	"Disable", "I/O module", "Modbus/TCP", "SLMP", "DI", "Control input", "Analog accumulation", "Binary accumulation", "Demo"	Following all items are blank when "Disable" is selected.
–	Module address	–	Integer 1 to 16	Configurable when "I/O module" is selected for CH setting.
–	CH No.	–	Integer 1 to 2	
–	Slave No.	–	Integer 0 to 63	Configurable when "Modbus/TCP" or "SLMP" is selected for CH setting.
–	Modbus/TCP register type	–	"Input register(3X)", "Holding Register (4X)"	Configurable when "Modbus/TCP" is selected for CH setting.
–	Modbus/TCP register address	–	Integer 1 to 65536	
–	Invert (Modbus/TCP)	–	"Disable", "Enable"	
–	SLMP device	–	Refer to table 6: Analog Input (AI) SLMP Device and table 11: Pulse Input (PI) SLMP Device.	Configurable when "SLMP" is selected for CH setting.
–	SLMP device No. (Decimal)	–	Integer 0 to 4294967295	Configurable when "SLMP" is selected for CH setting and "SLMP device" is supported. Refer to table 11: Pulse Input (PI) SLMP Device.
–	SLMP device No. (Hexadecimal)	–	Integer (hexadecimal) 0 to 0xffffffff	
–	Invert (SLMP)	–	"Disable", "Enable"	Configurable when "SLMP" is selected for CH setting.
–	DI CH No.	–	Integer 1 to 256	Configurable when "DI" is selected for CH setting.
CH name	–	–	16 characters	
CH comment	–	–	16 characters	
Scaling	–	–	3 digits after decimal point -10000000000.000 to 10000000000.000	
Number of decimal places	–	–	"0", "1", "2", "3"	
Engineering unit	–	–	8 characters	
Measuring mode (I/O module)	–	–	"Accumulation", "Engineering unit value"	Configurable when "I/O module" is selected for CH setting.
Pulse range configuration	–	–	"Disable", "Enable"	Configurable when "I/O module" is selected for CH setting and "Accumulation" is selected for measuring mode (I/O module).

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns Setting data	Remarks
Measuring mode (Modbus/TCP, SLMP)	–	–	"Accumulation", "Engineering unit value" "Float"	Configurable when "Modbus/TCP" or "SLMP" is selected for CH setting.
Measuring mode (DI)	–	–	"ON", "OFF", "UP", "DOWN"	Configurable when "DI" is selected for CH setting.
Pulse range	Lower limit	–	Integer 0 to 4294967295	Configurable when "I/O module" is selected for CH setting and "Accumulation" is selected for measuring mode (I/O module), or when "Modbus/TCP" or "SLMP" is selected for CH setting and "Accumulation" is selected for measuring mode (Modbus/TCP, SLMP).
–	Upper limit	–	Integer 0 to 4294967295	
Filter	–	–	"None", "Moving average", "Delay buffer"	Configurable when "I/O module" is selected for CH setting and "Engineering unit value" is selected for measuring mode (I/O module), or when "Modbus TCP" or "SLMP" is selected for CH setting and "Engineering unit value" is selected for measuring mode (Modbus/TCP, SLMP)..
–	Moving average samples	–	"4", "8", "16", "32", "64"	Configurable when "I/O module" is selected for CH setting, "Engineering unit value" is selected for measuring mode (I/O module, and "Moving average" is selected for filer, or when "Modbus TCP" or "SLMP" is selected for CH setting, "Engineering unit value" is selected for measuring mode (Modbus/TCP, SLMP), and "Moving average" is selected for filter.
–	Time constant	–	Integer 0 to 100	Configurable when "I/O module" is selected for CH setting, "Engineering unit value" is selected for measuring mode (I/O module, and "Delay buffer" is selected for filer, or when "Modbus TCP" or "SLMP" is selected for CH setting, "Engineering unit value" is selected for measuring mode (Modbus/TCP, SLMP), and "Delay buffer" is selected for filter.

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns Setting data	Remarks
Analog accumulation	AI CH No.	–	Integer 1 to 128 (Only for AI CH No.)	Configurable when "Analog accumulation" is selected for CH setting.
–	Counter rate	–	Integer 0 to 10000	
–	Time unit	–	"Minute", "Hour", "Day"	
–	Low-end cutout	–	Integer 0 to 12000	
Binary accumulation	AI CH No.	–	Integer 1 to 128 (Only for AI CH No.)	Configurable when "Binary accumulation" is selected for CH setting.
Alarm zone setting	–	–		The following is as same as table 5: Analog Data Zone Setting.

Table 11. Pulse Input (PI) SLMP Device

SLMP DEVICE	SLMP DEVICE NO. (DECIMAL)	SLMP DEVICE NO. (HEXADECIMAL)
0052H_Long timer current value (LTN)	✓	–
005AH_Long retentive timer current (LSTN)	✓	–
0056H_Long counter current value (LCN)	✓	–
0062H_Long index register (LZ)	✓	–
62H_Long index register (LZ)	✓	–
56H_Long counter current value (LCN)	✓	–
00A9H_Special register (SD)	✓	–
00A8H_Data register (D)	✓	–
00B4H_Link register (W)	–	✓
00C2H_Timer current value (TN)	✓	–
00C8H_Retentive timer current value (STN)	✓	–
00C5H_Counter current value (CN)	✓	–
00B5H_Link special register (SW)	–	✓
00CCH_Index register (Z)	✓	–
00AFH_File register (R) Block switching method	✓	–
00B0H_File register (ZR) Serial number access method	–	✓
002CH_Module refresh register (RD)	–	✓
A9H_Special register (SD)	✓	–
A8H_Data register (D)	✓	–
B4H_Link register (W)	–	✓
C2H_Timer current value (TN)	✓	–
C8H_Retentive timer current value (STN)	✓	–
C5H_Counter current value (CN)	✓	–
B5H_Link special register (SW)	–	✓
CCH_Index register (Z)	–	✓
AFH_File register (R) Block switching method	–	✓
B0H_File register (ZR) Serial number access method	–	✓

3.2.5 Analog Function Register (MA) Setting

File name: MA.csv

Setting is same as DL30GCFG [Input/Output] -> [Analog Function Register MA)]. Details are as following list.

Table 12. Analog Function Register (MA)

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th to 260th columns Setting data	Remarks
– (blank)	–	–	–	(CH No.) MA1 to MA 256	
Function	–	–	–	"Disable", "Addition/Subtraction", "Multiplication", "Division", "Square root", "Moving average", "Delay buffer", "Peak hold (max)", "Valley hold (min)", "exp", "Common logarithm", "Natural Logarithm", "Analog accumulation", "Power", "F value calculation", "Scaling", "Upper/lower signal limitter"	
Function setting	Input	X1	Type	Function setting corre- sponding to each equa- tion.	Blank when "Disable" is selected for function.
–	–	–	CH		
–	–	X2	Type		
–	–	–	CH		
–	–	X3	Type		
–	–	–	CH		
–	Exponent	K1	–		
–	–	K2	–		
–	–	K3	–		
–	–	K4	–		
–	–	K5	–		
–	–	A0	–		
–	–	A1	–		
–	–	A2	–		
CH name	–	–	–	Integer 1 to 16	
CH comment	–	–	–	Integer 1 to 16	
Control on browser	–	–	–	"Enable", "Disable"	Configurable when "Disable" is selected for function.
Operational range on browser	Lower limit	–	–	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Disable" is selected for function, and "Enable" is selected for control on browser.
–	Upper limit	–	–		
Number of decimal place	–	–	–	"0", "1", "2", "3"	
Engineering unit	–	–	–	8 characters	
Initial value	–	–	–	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Disable" is selected for function.
Memory a power loss (MA128 - MA159)	–	–	–	"Enable", "Disable"	CH No is 128 to 159, and when "Disable" is selected for function.

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th to 260th columns Setting data	Remarks
Alarm zone setting	–	–	–		The following is as same as table 5: Analog Data Zone Setting.

Table 13. Analog Function Setting List

Item		Function	Addition/ Subtraction	Multiplication/ Division	Square root/ Power	Peak hold (max)/ Valley hold (min)/ exp/ Commn logarithm/ Natual logarithm	Moving average
Input	X1	Type	"AI", "DI", "PI", "MA"				
		CH	CH No. corresponding to the type.				
	X2	Type	"AI", "DI", "PI", "MA"	–	–	–	–
		CH	CH No. corresponding to the type.	–	–	–	–
	X3	Type	"AI", "DI", "PI", "MA"	–	–	–	–
		CH	CH No. corresponding to the type.	–	–	–	–
Exponent	K1	–	3 digits after decimal point*1			–	"4", "8", "16", "32", "64"
	K2		3 digits after decimal point*1		–	–	–
	K3		3 digits after decimal point*1	–	–	–	–
	K4		–	–	–	–	–
	K5		–	–	–	–	–
	A0		3 digits after decimal point*1		–	–	–
	A1		–	3 digits after decimal point*1	–	–	–
	A2		–	3 digits after decimal point*1	–	–	–

Item		Function	Delay buffer	Scaling	Upper/lower signal limit
Input	X1	Type	"AI", "DI", "PI", "MA"		
		CH	CH No. corresponding to the type.		
	X2	Type	–	–	–
		CH	–	–	–
	X3	Type	–	–	–
		CH	–	–	–
Exponent	K1	–	Integer - to 100	3 digits after decimal point (input zero)*1	3 digits after decimal point (lower limit)*1
	K2		–	3 digits after decimal point (input span)*1	3 digits after decimal point (upper limit)*1
	K3		–	3 digits after decimal point (output zero) -2000.000 to 12000.000	–
	K4		–	3 digits after decimal point (output span) -2000.000 to 12000.000	–
	K5		–	–	–
	A0		–	–	–
	A1		–	–	–
	A2		–	–	–

Item	Function		Analog accumulation	F value calculation
Input	X1	Type	"AI", "PI", "MA"	
		CH	CH No. corresponding to the type.	
	X2	Type	–	–
		CH	–	–
	X3	Type	–	–
		CH	–	–
Exponent	K1	–	Integer 0 to 100	3 digits after decimal point (Ref temp °C)*1
	K2		"Minute", "Hour", "Day" (time unit)	3 digits after decimal point (Z value) 0.001 to 10000000000.000
	K3		3 digits after decimal point (low-end cutout) 0.000 to 120.000	–
	K4		3 digits after decimal point (zero)*1	–
	K5		3 digits after decimal point (span)*1	–
	A0		–	–
	A1		–	–
	A2		–	–

*1. 10000000000.000 to 10000000000.000

3.2.6 Digital Function Register (MD) Setting

File name: MD.csv

Setting is same as DL30GCFG [Input/Output] -> [Digital Function Register MA)]. Details are as following list.

Table 14. Digital Function Register (MD)

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 131st columns Setting data	Remarks
– (blank)	–		(CH No.) DI 1 to DI 256	
Function	–	–	"None", "Equal", "AND", "OR", "XOR", "NOT", "RUN"	
Input	1	Type	Function setting corresponding to each function. Table 15: Digital Function Setting List	Blank when "RUN" is selected for function.
–	–	CH		
–	2	Type		
–	–	CH		
–	Exponent	K1		
–	Consecut	Type		
–	–	CH		
–	–	Count		
CH name	–	–	16 characters	
CH comment	–	–	16 characters	
Control on browser	–	–	"Enable", "Disable"	Configurable when "None" is selected for function.
Memory at power loss	–	–	"Enable", "Disable"	CH No is 128 to 159, and when "Disable" is selected for function.
Status (ON/OFF)	–	–	...	The following is as same as table 8: Digital Data Status (ON/OFF).

Table 15. Digital Function Setting List

Item		Function	None	Equal, NOT	AND, OR	XOR
Input	X1	Type	–	"DI", "MD"		
		CH	–	CH No. corresponding to the type.		
	X2	Type	–	–	"DI", "MD"	
		CH	–	–	CH No. corresponding to the type.	
Exponent	K1	–	Integer 0 to 999	–	–	–
Consecut[1]	K2		–	–	"DI", "MD"	–
	K3	–	–	–	CH No. corresponding to the type.	–
	K4		–	–	Integer 3 to16	–

[1]. Configurable when "AND" or "OR" is selected for function.
   Blank when Input X1 and X2 are valid.

3.2.7 Analog Output (AO) Setting

File name: AO.csv
Setting is same as DL30GCFG [Input/Output] -> [Digital Function Register (MA)]. Details are as following list.

Table 16. Analog Output (AO)

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th to 131st columns Setting data	Remarks
– (blank)	–			(CH No.) DO1 to DO128	
CH setting	–	–	–	"Disable", "I/O module", "Modbus/TCP", "SLMP"	Following all items are blank when "Disable" is selected.
–	Module address	–	–	Integer 1 to 16	Configurable when "I/O module" is selected for CH setting.
–	CH No.	–	–	Integer 1 to 4	
–	Slave No.	–	–	Integer 0 to 63	Configurable when "Modbus/TCP" or "SLMP" is selected for CH setting.
–	Modbus/TCP register type	–	–	"Holding Register (4X)"	Configurable when "Modbus/TCP" is selected for CH setting.
–	Modbus/TCP register address	–	–	Integer 1 to 65536	
–	SLMP device	–	–	Refer to table 6: Analog Input (AI) SLMP Device	Configurable when "SLMP" is selected for CH setting.
–	SLMP device No. (Decimal)	–	–	Integer 0 to 4294967295	Configurable when "SLMP" is selected for CH setting and "SLMP device" is supported. Refer to table 6: Analog Input (AI) SLMP Device
–	SLMP device No. (Hexadecimal)	–	–	Integer (hexadecimal) 0 to 0xffffffff	
CH name	–	–	–	16 characters	
CH comment	–	–	–	16 characters	
Control on Browser	–	–	–	"Enable", "Disable"	Configurable when "Disable" is selected for mode of I/O mapping.
Operational range on browser	Lower limit	–	–	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Enable" is selected for control on browser and "Disable" is selected for mode of I/O mapping.
–	Upper limit	–	–		
Scaling	–	–	–	3 digits after decimal point -10000000000.000 to 10000000000.000 0.0000 is invalid	
Number of decimal place	–	–	–	"0", "1", "2", "3"	
Engineering unit	–	–	–	8 characters	
Initial value	–	–	–	Integer -32768 to 32767	
I/O mapping	Mode	–	–	"None", "Analog", "Discrete"	Configurable when "Disable" is selected for control on browser.

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th to 131st columns Setting data	Remarks
–	Analog	Type	–	"AI", "MA"	Configurable when "Analog" is selected for I/O mapping.
–	–	CH	–	CH No. corresponding to the type	
–	Discrete	0	Type	"0 fixed value", "1 fixed value", "DI", "MD"	Configurable when "Discrete" is selected for I/O mapping.
–	–	–	CH	CH No. corresponding to the type	Configurable when "Discrete" is selected for I/O mapping and when "DI" or "MD" is selected for 0 type.
...	...	...	...	...	Discrete 1 to 14 Same as Discrete 0
–	Discrete	15	Type	"0 fixed value", "1 fixed value", "DI", "MD"	Configurable when "Discrete" is selected for I/O mapping.
–	–	–	CH	CH No. corresponding to the type	Configurable when "Discrete" is selected for I/O mapping and when "DI" or "MD" is selected for 15 type.

3.2.8 Discrete Output (DO) Setting

File name: DO.csv

Setting is same as DL30GCFG [Input/Output] -> [Discrete Output (DO)]. Details are as following list.

Table 17. Discrete Output (DO)

1st column Item 1	2nd column Item 2	3rd to 130th columns Setting data	Remarks
– (blank)	–	(CH No.) DO1 to DO 128	
CH setting	–	"Disable", "I/O module", "Modbus/TCP", "SLMP"	Following all items are blank when "Disable" is selected.
–	Module address	Integer 1 to 16	Configurable when "I/O module" is selected for CH setting.
–	CH No.	Integer 1 to 16	
–	Slave No.	Integer 0 to 63	Configurable when "Modbus/TCP" or "SLMP" is selected for CH setting.
–	Modbus/TCP register type	"Coil (0X)"	Configurable when "Modbus/TCP" is selected for CH setting.
–	Modbus/TCP register address	Integer 1 to 65536	
–	SLMP device	Refer to table 9: Discrete Input (DI) SLMP Device	Configurable when "SLMP" is selected for CH setting.
–	SLMP device No. (Decimal)	Integer 0 to 65536	Configurable when "SLMP" is selected for CH setting and "SLMP device" is supported.
–	SLMP device No. (Hexadecimal)	Integer (hexadecimal) 0 to 0xffffffff	Refer to table 9: Discrete Input (DI) SLMP Device
CH name	–	16 characters	
CH comment	–	16 characters	
Status (ON)	Display comment	8 characters	
–	Color	RGB (integer, hexadecimal) 0 to 0x00ffffff	
–	Display comment	8 characters	
–	Color	RGB (integer, hexadecimal) 0 to 0x00ffffff	
Invert	–	"Disable" "Invert"	
I/O mapping	Type	"Disable", "DI", "MD"	
–	CH	CH No. corresponding to the type	
Control on Browser	–	"Enable", "Disable"	Configurable when "Disable" is selected for mode of I/O mapping.

3.2.9 Grouped Digital Output (GDO) Setting

File name: DO.csv

Setting is same as DL30GCFG [Input/Output] -> [Discrete Output (DO)]. Details are as following list.

Table 18. Discrete Output (DO)

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 35th columns Setting data	Remarks
– (blank)	–	–	(CH No.) DO 1 to DO 128	
CH setting	–	–	"Disable", "Enable"	Following all items are blank when "Disable" is selected.
CH name	–	–	16 characters	
CH comment	–	–	16 characters	
Status (ON)	Display comment	–	8 characters	
–	Color	–	RGB (integer, hexadecimal) 0 to 0x00ffffff	
–	Display comment	–	8 characters	
–	Color	–	RGB (integer, hexadecimal) 0 to 0x00ffffff	
Grouped channels	1	Type	"Disable", "MD", "DO"	
–	–	CH	CH No. corresponding to the type	Configurable when other than "Disable" is selected for 1 type of grouped channels.
–	...	...	...	Grouped channels 2 to 31 Same as grouped channel 1
–	32	Type	"Disable", "MD", "DO"	
–	–	CH	CH No. corresponding to the type	Configurable when other than "Disable" is selected for 32 type of grouped channels.
I/O mapping	Type	–	"Disable", "DI", "MD"	
–	CH	–	CH No. corresponding to the type	Configurable when other than "Disable" is selected for mode of I/O mapping.
Control on Browser	–	–	"Enable", "Disable"	Configurable when "Disable" is selected for mode of I/O mapping.

3.3 Communication

Outputs setting parameters as columns and setting data as rows.
Only for web browser, outputs setting data of each ID as rows.

E.g. WEB.csv

```
Protocol...HTTP
Port address...80
...ID1,...,ID32
Authorization.Mode,,,Enable,...Disable,
,Login ID,,,m-system,...,,
,Password,,,DK30,...,,
...
```

E.g. FTPS.csv

```
Mode,"Enable"
Login ID,DL30
Password,Dl30
Port address,21
```

3.3.1 WEB

File name: WEB.csv

Setting is same as DL30GCFG [Communication] -> [WEB]. Details are as following list.

Table 19. WEB

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Setting data	Remarks
Protocol	– (blank)	–	"HTTP", "HTTPS"	
Port address	–	–	Integer "0 to 65535	
1st column **Item 1**	**2nd column** **Item 2**	**3rd column** **Item 3**	**4th to 35th columns** **Setting data**	**Remarks**
–	–	–	(ID No. ID1 to ID32)	
Authorization	Mode	–	"Disable", "Enable"	Following all items are blank when "Disable" is selected.
–	Login ID	–	Single-byte alphanumerical and symbols, 16 characters	
–	Password	–	Single-byte alphanumerical and symbols, 16 characters	
Function	CH	MA 1 - 32	Integer (hexadecimal), bit, operation is not available when 0, operation is available when 1	
–	–	MA 33 - 64		
–	–	MA 65 - 96		
–	–	MA 97 - 128		
–	–	MA 129 - 160		
–	–	MA 161 - 192		
–	–	MA 193 - 224		
–	–	MA 225 - 256		
–	–	MD 1 - 32		
–	–	MD 33 - 64		
–	–	MD 65 - 96		
–	–	MD 97 - 128		
–	–	MD 129 - 160		
–	–	MD 161 - 192		
–	–	MD 193 - 224		
–	–	MD 225 - 256		
–	–	AO 1- 32		
–	–	AO 33 - 64		
–	–	DO 1 - 32		
–	–	DO 33 - 64		
–	–	DO 65 - 96		
–	–	DO 97 - 128		
–	–	GDO 1 - 32		
–	Schedule unit 1 - 32	–		

3.3.2 FTP Server

File name: FTPS.csv

Setting is same as DL30GCFG [Communication] -> [FTP server]. Details are as following list.

Table 20. FTP Server

1st column Item 1	2nd column Setting data	Remarks
Mode	"Enable", "Disable"	Following all items are blank when "Disable" is se-lected.
Login ID	Single-byte alphanumerical and symbols, 16 characters	
Password	Single-byte alphanumerical and symbols, 16 characters	
Port address	Integer 0 to 65535	

3.3.3 SNTP

File name: SNTP.csv

Setting is same as DL30GCFG [Communication] -> [SNTP server]. Details are as following list.

Table 21. SNTP Server

1st column Item 1	2nd column Setting data	Remarks
Mode	"Enable", "Disable"	Following all items are blank when "Disable" is se-lected.
SNTP server	64 characters	

3.3.4 Modbus/TCP Slave

File name: MODBUS.csv

Setting is same as DL30GCFG [Communication] -> [Modbus/TCP slave]. Details are as following list.

Table 22. Modbus/TCP Slave

1st column Item 1	2nd column Setting data	Remarks
Mode	"Enable", "Disable"	Following all items are blank when "Disable" is se-lected.
Port address	Integer 0 to 65535	
Linger time	Integer 0 to 3000	

3.3.5 SMTP/POP3

File name: SMTP_POP3.csv

Setting is same as DL30GCFG [Communication] -> [SMTP/POP3]. Details are as following list.

Table 23. SMTP/POP3

1st column Item 1	2nd column Item 2	3rd column Item 3	Remarks
Character code	– (blank)	"UTF-8", "ISO-2022-JP"	
SLMP over SSL	–	"Enable", "Disable"	
SLMP authentication	–	"Disable", "Auto", "CRAM-MD5", "LOGIN", "PLAIN"	
–	ID	Single-byte alphanumerical and symbols, 64 characters	Configurable when other than "Disable" is selected for SMTP authentication.
–	Password		
POP before SMTP authentication	–	"Enable", "Disable"	
–	POP3 ID	Single-byte alphanumerical and symbols, 64 characters	Configurable when "Enable" is selected for POP befor SMTP.
–	POP3 password		
DL30 e-mail address	–	64 characters	
SMTP server IP address	–	64 characters	
POP3 server IP address	–	64 characters	Configurable when "Enable" is selected for POP befor SMTP.
DL30 e-mail account	–	64 characters	
Sender name	–	64 characters	
SMTP port address	–	Integer 0 to 65535	
POP3 port address	–	Integer 65535	
STARTTLS	–	"Enable", "Disable"	Configurable when "Enable" is selected for SMTP over SSL.

3.3.6 FTP Client

File name: FTPC.csv

Setting is same as DL30GCFG [Communication] -> [FTP client]. Details are as following list.

Table 24. FTP Client

1st column Item 1	2nd column Item 2	3rd column Item 3	Remarks
Mode	– (blank)	"Enable", "Disable"	Following all items are blank when "Disable" is selected.
Protocol	–	"FTP", "FTPS"	
Port address	–	Integer 0 to 65535	
FTP	Server address	Single-byte alphanumerical and symbols, 64 characters	
–	Login ID		
–	Password		
–	Subfolder		
–	PASV address	"Enable", "Disable"	
Communication failure output	Type	"None", "MD", "DO", "GDO"	
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for communication failure output.
Logging data	Send upon saving of file	"Enable", "Disable"	
–	Send command	"None", "MD"	
–	CH	CH No. corresponding to send command	Configurable when other than "None" is selected for send command in logging data.
Event log	Send upon saving of file	"Enable", "Disable"	
–	Send command	"None", "MD"	
–	CH	CH No. corresponding to send command	Configurable when other than "None" is selected for send command in event log.
System log	Send upon saving of file	"Enable", "Disable"	
–	Send command	"None", "MD"	
–	CH	CH No. corresponding to send command	Configurable when other than "None" is selected for send command in system log.
Communication log	Send upon saving of file	"Enable", "Disable"	
–	Send command	"None", "MD"	
–	CH	CH No. corresponding to send command	Configurable when other than "None" is selected for send command in communication log.
Schedule log	Send upon saving of file	"Enable", "Disable"	
–	Send command	"None", "MD"	
–	CH	CH No. corresponding to send command	Configurable when other than "None" is selected for send command in schedule log.
Report from data	Send upon file update	"Enable", "Disable"	

3.4 E-mail

Outputs setting parameters as columns and setting data as rows.
For address list and mail template, output setting data of each No as rows.
For e-mailing calendar, outputs setting data of non-business day and holiday for each day as rows.

E.g. Form.csv

```
...No.1,No.2,...,No.128,
Mode...Enable,Disable,...,Enable
Mail to,No.1,,To,,...,None,
...
,No.128,,None,,...,To,
Subject,,,M-System,,...,DL30
...
```

E.g. Calendar.csv

```
Business hour, 1, start,hour,8,
...minute,45,
,,end,hout,17,
...minute,30,
...
,,,,1,...,31,,
2015,January, non-business day,,ON,...,OFF,
,,holiday,,OFF,...,ON,
...
```

3.4.1 Address List

File name: MailAddr.csv
Setting is same as DL30GCFG [E-mail] -> [Adress list]. Details are as following list.

Table 25. Address List

1st column Item 1	4th to 35th columns Setting data	Remarks
– (blank)	(No.) No.1 to No.64	
Name	64 characters	
Address	64 characters	

3.4.2 Mail Template

File name: Form.csv
Setting is same as DL30GCFG [E-mail] -> [Mail template]. Details are as following list.

Table 26. Mail Template

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 67th columns Setting data	Remarks
– (blank)	–	–	(No.) No.1 to No.64	
Mode	–	–	"Enable" "Disable"	Following all items are blank when "Disable" is selected.
Mail to	No,01	–	"None", "To"	
...	...	...	...	Mail to No.02 to No.63 Same as Mail to No.01
–	No.64	–	"None", "To"	
Subject	–	–	32 characters	
Body text	–	–	256 characters	
Enabled time period	–	–	"Any time", "Business day", "Non-business day", "Within business hour", "Out of business hour", "Non-business hour", "Pause"	
Business hour No.	–	–	Integer 1 to 6	Configurable when "Within business hour", "Out pf business hour", or "Non-business hour" is selected for enabled time period
Attached CH data	CH01	Type	"None", "AI", "DI", "PI", "MA", "MD", "AO", "DO", "GDO"	
–	–	CH	CH No. corresponding to the type	Configurable when other than "Disable" is selected for attached CH data in CH01.
–	...	...		Attached CH data CH02 to CH31 Same as attached CH data CH01
–	CH32	Type	"None", "AI", "DI", "PI", "MA", "MD", "AO", "DO", "GDO"	
–	–	CH	CH No. corresponding the type	Configurable when other than "Disable" is selected for attached CH data CH32.
Attached file	–	–	"None", "Daily report", "Monthly report", "Yearly report"	
Delivery success output	Mode	–	"None", "ON", "OFF"	Following items are blank when "None" is selected.
–	Type	–	"MD", "DO", "GDO"	
–	CH	–	CH No. corresponding the type	

3.4.3 Regular Report

File name: Time.csv
Setting is same as DL30GCFG [E-mail] -> [Regular report]. Details are as following list.

Table 27. Regular Report

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Setting data	Remarks
Mode	–	–	"Enable", "Disable"	Following all items are blank when "Disable" is selected.
Mail template No. 1 - 32	–	–	Integer (hexadecimal), bit, Disable when 0, Mail when 1	
Mail template No. 33 - 64	–	–		
Mail template No. 65 - 96	–	–		
Mail template No. 97 - 128	–	–		
Day of week	Sun	–	"ON", "OFF"	
–	Mon	–		
–	Tues	–		
–	Wed	–		
–	Thu	–		
–	Fri	–		
–	Sat	–		
Time to send	00	Report	"Enable", "Disable"	Following items are blank when "Disable" is selected.
–	–	Offset: minute	Integer 0 to 59	
–	–	Offset: second	Integer 0 to 59	
...	...	...	...	Time to send 01 to 22 Same as time to send 00
–	23	Report	"Enable", "Disable"	Following items are blank when "Disable" is selected.
–	–	Offset: minute	Integer 0 to 59	
–	–	Offset: second	Integer 0 to 59	

3.4.4 Delivery Failure Output

File name: Error.csv
Setting is same as DL30GCFG [E-mail] -> [Delivery failure output]. Details are as following list.

Table 28. Delivery Failure Output

1st column Item 1	2nd column Item 2	Remarks
Mode	"None", "ON", "OFF"	
Type	"MD", "DO", "GDO"	Configurable when other than "None" is selected for mode.
CH	CH No. corresponding to the type	

3.4.5 E-mailing Calendar

File name: Calendar.csv

Setting is same as DL30GCFG [E-mail] -> [Mailing calendar]. Details are as following list.

Table 29. E-mailing Calendar

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th column Setting data	Remarks
Business hour	1	Start	Hour	Integer 0 to 23	
– (blank)	–	–	Minute	Integer 0 to 59	
–	–	End	Hour	Integer 0 to 23	
–	–	–	Minute	Integer 0 to 59	
–	...	...	...	...	Business hour 2 to 5 Same as business hour 1
–	6	Start	Hour	Integer 0 to 23	
–	–	–	Minute	Integer 0 to 59	
–	–	End	Hour	Integer 0 to 23	
–	–	–	Minute	Integer 0 to 59	

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th to 35th columns Setting data	Remarks
–	–	–	–	(Date) 1 to 31	
2015	January	Non-business day	–	"ON", "OFF" Non-business day, holiday when "ON", Business day, weekday when "OFF"	For months with 28 to 30 days, days less than 31 days are blank.
–	–	Holiday	–		
–	February	Non-business day	–		
–	–	Holiday	–		
–	March	Non-business day	–		
–	–	Holiday	–		
–	April	Non-business day	–		
–	–	Holiday	–		
–	May	Non-business day	–		
–	–	Holiday	–		
–	June	Non-business day	–		
–	–	Holiday	–		
–	July	Non-business day	–		
–	–	Holiday	–		
–	August	Non-business day	–		
–	–	Holiday	–		
–	September	Non-business day	–		
–	–	Holiday	–		
–	October	Non-business day	–		
–	–	Holiday	–		
–	November	Non-business day	–		
–	–	Holiday	–		
–	December	Non-business day	–		
–	–	Holiday	–		
...	...	...	...		2016 to 2098 Same as 2015
1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th to 35th columns Setting data	Remarks

2099	January	Non-business day	–	"ON", "OFF"	For months with 28 to
–	–	Holiday	–	Non-business day,	30 days, days less than
–	February	Non-business day	–	holiday when "ON",	31 days are blank.
–	–	Holiday	–	Business day, weekday	
–	March	Non-business day	–	when "OFF"	
–	–	Holiday	–		
–	April	Non-business day	–		
–	–	Holiday	–		
–	May	Non-business day	–		
–	–	Holiday	–		
–	June	Non-business day	–		
–	–	Holiday	–		
–	July	Non-business day	–		
–	–	Holiday	–		
–	August	Non-business day	–		
–	–	Holiday	–		
–	September	Non-business day	–		
–	–	Holiday	–		
–	October	Non-business day	–		
–	–	Holiday	–		
–	November	Non-business day	–		
–	–	Holiday	–		
–	December	Non-business day	–		
–	–	Holiday	–		

3.5 Graph/Display

Outputs setting parameters as columns and setting data as rows.
For trend view, output setting data of each page as rows.
For data view, outputs setting data of each channel as rows.

E.g. Form.csv

```
,,Page 1,...,Page 16,
Page name,,M-System,...Trend view,
Trend speed,,1sec.,...,10sec.,
...
Pen setting 4,I/O type,DI,...,AI,
,CH,1,...,10,
,Thick line,Disable,...,Enable,
,Color,0x00ff0000,...,0x000080ff,
,Lower limit,,...,-15.000,
,Upper limit,,...,105.000,
```

E.g. Calendar.csv

```
,CH1,Ch2...Ch32,CH33,...,CH64,CH65,...,CH128,CH129,...,CH256
AI,ON,ON,...,ON,ON,...,OFF,OFF,...,OFF,
DI,ON,ON,...,ON,ON,...,ON,ON,...,ON,OFF,...,OFF,
PI,ON,ON,...,OFF,OFF,...,OFF,OFF,...,OFF,
MA,ON,ON,...,OFF,OFF,...,OFF,OFF,...,ON,ON,...,OFF,
MD,ON,ON,...,ON,ON,...OFF,OFF,...,ON,ON,...,OFF,
AO,ON,ON,...,OFF,OFF,...OFF,
DO,ON,ON,...,ON,OFF,...,OFF,OFF,...,OFF,
GDO,ON,ON,...,OFF,
```

3.5.1 Trend

File name: Trend.csv

Setting is same as DL30GCFG [Graph/Display] -> [Trend]. Details are as following list.

Table 30. Trend

1st column Item 1	2nd column Item 2	3rd to 18th columns Setting data	Remarks
– (blank)	–	(Page No.) Page 1 to Page 16	
Page name	–	64 characters	
Trend speed	–	"1 second", "5 seconds", "10 seconds", "30 seconds", "1 minute", "5 seconds", "10 seconds", "15 seconds", "30 seconds", "1 hour", "1 day"	
Hour	–	Integer 0 to 23	Configurable when "1 day" is selected for trend speed.
Pen setting 1	I/O type	"Disable", "AI", "DI", "PI", "MA", "MD", "AO", "DO", "GDO"	
–	CH	CH No. corresponding to the type	Configurable when other than "Disable" is selected for I/O type in pen setting 1.
–	Thick line	"Enable", Disable"	
–	Color	RGB (integer, hexadecimal) 0 to 0x00ffffff	
–	Lower limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "AI", "PI", "MA", or "AO" is selected for I/O type in pen setting 1.
–	Upper limit		
...	...	...	
Pen setting 4	I/O type	"Disable", "AI", "DI", "PI", "MA", "MD", "AO", "DO", "GDO"	
–	CH	CH No. corresponding to the type	Configurable when other rhan "Disable" is selected for I/O type in pen setting 1.
–	Color	"Enable", Disable"	
–	Lower limit	RGB (integer, hexadecimal) 0 to 0x00ffffff	
–	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "AI", "PI", "MA", or "AO" is selected for I/O type in pen setting 1.

3.5.2 Data

File name: Data.csv

Setting is same as DL30GCFG [Graph/Display] -> [Data]. Details are as following list.

Table 31. Data

1st column Item 1	2nd to 57th columns Setting data	Remarks
– (blank)	–	(CH No.) CH1 to CH256
AI	"ON": display "OFF": not display	CH129 or later are blank.
DI		
PI		CH129 or later are blank.
MA		
MD		
AO		CH65 or later are blank.
DO		CH129 or later are blank.
GDO		CH33 or later are blank.

3.6 Record

Outputs setting parameters as column and setting data as row.

E.g. Pattern.csv

```
Mode,,,,Enable,
Header Line 1, Mode,,Enebale,
...
Pen, PEN1, Type,,AI,
,,CH,,1,
,,Sampling method,,Momentary value,
,,,Upper limit,1150.000,
,,,Lower limit,-5.00,
...
```

3.6.1 Logging

File name: Logging.csv
Setting is same as DL30GCFG [Record] -> [Logging]. Details are as following list.

Table 32. Logging

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th column Setting data	Remarks
Mode	– (blank)	–	–	"Enable", "Disable"	Following all items are blank when "Disable" is selected.
Header Line 1	–	–	–	"Enable", "Disable"	Header Line 1 is blank when "Disable" is selected.
–	–	–	–	1024 characters	
Header Line 2	–	–	–	Same as Line 1	Same as Line 1
–	–	–	–		
Heade Line 3	–	–	–		
–	–	–	–		
SSPRO format	–	–	–	"Enable", "Disable"	
Pen	PEN1	Type	–	"None", "AI", "DI", "PI", "MA", "MD", "AO", "DO", "GDO"	PEN 1 and after are blank when "None" is selected
–	–	CH	–	CH No. corresponding to the type	
–	–	Sampling method	–	"Momentary value", "Average value", "Peak value (max)", Peak value (min)"	Configurable when "AI", "PI", "MA", or "AO" is selected for type for PEN1 in pen.
–	–	Data range	Mode	"Enable", "Disable"	Configurable when "AI", "PI", "MA", or "AO" is selected for type for PEN1 in pen.
–	–	–	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Enable" is selected for mode in data range for PEN1 in pen.
–	–	–	Lower limit		
–	–	Error mode	Mode	"Precious value", "Fixed value", "Fixed characters"	Configurable when "AI", "DI", or "PI" is selected for type for PEN1 in pen, or "MA" or "AO" is selected for type for PEN1 in pen and "Enable" is selected for Mode in data range for PEN1 in pen.
–	–	–	Fixed value	"ON", "OFF" when "DI" is selected for type for PEN1 in pen. When other than than the above, 3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Fixed value" is selected for mode in error mode for PEN1 in pen.

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th column Setting data	Remarks
–	–	–	Fixed characters	8 characters	Configurable when "Fixed characters" is selected for mode in error mode for PEN1 in pen.
...	...	...	...	...	Pen, PEN2 to PEN127 Same as PEN1
–	PEN128	Type	–	"None", "AI", "DI", "PI", "MA", "MD", "AO", "DO", "GDO"	PEN 128 and after are blank when "None" is selected
–	–	CH	–	CH No. corresponding to the type	
–	–	Sampling method	–	"Momentary value", "Average value", "Peak value (max)", Peak value (min)"	Configurable when "AI", "PI", "MA", or "AO" is selected for type for PEN128 in pen.
–	–	Data range	Mode	"Enable", "Disable"	Configurable when "AI", "PI", "MA", or "AO" is selected for type for PEN128 in pen.
–	–	–	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Enable" is selected for mode in data range for PEN128 in pen.
–	–	–	Lower limit		
–	–	Error mode	Mode	"Precious value", "Fixed value", "Fixed characters"	Configurable when "AI", "DI", or "PI" is selected for type for PEN1 in pen, or "MA" or "AO" is selected for type for PEN1 in pen and "Enable" is selected for Mode in data range for PEN128 in pen.
–	–	–	Fixed value	"ON", "OFF" when "DI" is selected for type for PEN1 in pen. When other than than the above, 3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Fixed value" is selected for mode in error mode for PEN128 in pen.
–	–	–	Fixed characters		Configurable when "Fixed charcters" is selected for mode in error mode for PEN128 in pen.
Auto start	–	–	–	"Enable", "Disable"	
SD card auto delete	–	–	–	"Enable", "Disable"	
SD card record character set	–	–	–	"SJIS", "UTF-8"	
Storing rate time unit	Mode	–	–	"Second", "Minute", "Hour"	
–	Second	–	–	"1", "2", "5", "10", "15", "20", "30"	Configurable when "Second" is selected for mode in storing rate time unit.
–	Minute	–	–	"1", "2", "5", "10", "15", "20", "30"	Configurable when "Minute" is selected for mode in storing rate time unit.

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th column Setting data	Remarks
–	Hour	0	Logging	"Enable", "Disable"	Configurable when "Hour" is selected for mode in storing rate time unit.
–	–	–	Offset (min.)	Integer 0 to 59	Configurable when "Enable" is selected for logging for 0 in hour in storing rate time unit.
–	–	–	Offset (sec.)	Integer 0 to 59	
...	...	...	...	...	1 in hour in storing rate time unit to 23 in hour in storing time unit Same as 0
–	–	23	Logging	"Enable", "Disable"	Configurable when "Hour" is selected for mode in storing rate time unit.
–	–	–	Offset (min.)	Integer 0 to 59	Configurable when "Enable" is selected for logging for 0 in hour in storing rate time unit.
–	–	–	Offset (sec.)	Integer 0 to 59	
–	Dateline (hour)	–	–	Integer 0 to 23	
–	Day of week	Sun	–	"ON", "OFF"	
–	–	Mon	–		
–	–	Tue	–		
–	–	Wed	–		
–	–	Thu	–		
–	–	Fri	–		
–	–	Sat	–		

3.6.2 Event

File name: Event.csv

Setting is same as DL30GCFG [Record] -> [Event]. Details are as following list.

Table 33. Event

1st column Item 1	2nd column Item 2	3rd column Setting data	Remarks
SD card auto delete	– (blank)	"Enable", "Disable"	
Event log	Mode	"Enable", "Disable"	
–	SD card record character set	"SJIS", "UTF-8"	Configurable when "Enable" is selected for mode in event log.
System log	–	"Enable", "Disable"	
Communication log	–	"Enable", "Disable"	
Schedule log	Mode	"Enable", "Disable"	
–	SD card record character set	"SJIS", "UTF-8"	Configurable when "Enable" is selected for mode in schadule log.

3.6.3 Report

File name: Report.csv
Setting is same as DL30GCFG [Record] -> [Report]. Details are as following list.

Table 34. Report

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th column Setting data	Remarks
Mode	– (blank)	–	–	"Enable", "Disable"	Following all items are blank when "Disable" is selected.
SD card auto delete	–	–	–	"Enable", "Disable"	
SD card record character set	–	–	–	"SJIS", "UTF-8"	
Page title	Daily report	–	–	32 characters	
–	Monthly report	–	–	32 characters	
–	Yearly report	–	–	32 characters	
Pen	PEN1	Type	–	"None", "AI", "PI", "MA"	PEN 1 and after are blank when "None" is selected
–	–	CH	–	CH No. corresponding to the type	
–	–	Sampling method	–	"Momentary value", "Average value", "Peak value (max)", "Peak value (min)"	
–	–	Basic data	–	"Sum", "Average", "Maximum", "Minimum"	
–	–	Data range	Mode	"Enable", "Disable"	
–	–	–	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Enable" is selected for mode in data range for PEN1 in pen.
–	–	–	Lower limit		
–	–	Error mode	Mode	"Precious value", "Fixed value", "Fixed characters"	Configurable when "AI", "DI", or "PI" is selected for type for PEN1 in pen, or "MA" or "AO" is selected for type for PEN1 in pen and "Enable" is selected for Mode in data range for PEN1 in pen.
–	–	–	Fixed value	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Fixed value" is selected for mode in error mode for PEN1 in pen.
–	–	–	Fixed characters	8 characters	Configurable when "Fixed characters" is selected for mode in error mode for PEN1 in pen.

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th column Setting data	Remarks
...	...	...	...	...	Pen, PEN2 to PEN127 Same as PEN1
–	PEN128	Type	–	"None", "AI", "PI", "MA"	
–	–	CH	–	CH No. corresponding to the type	
–	–	Sampling method	–	"Momentary value", "Average value", "Peak value (max)", Peak value (min)"	
–	–	Basic data	–	"Sum", "Average", "Maximum", "Minimum"	
–	–	Data range	Mode	"Enable", "Disable"	
–	–	–	Upper limit	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Enable" is selected for mode in data range for PEN128 in pen.
–	–	–	Lower limit		
–	–	Error mode	Mode	"Precious value", "Fixed value", "Fixed characters"	Configurable when "AI", "DI", or "PI" is selected for type for PEN1 in pen, or "MA" or "AO" is selected for type for PEN1 in pen and "Enable" is selected for Mode in data range for PEN128 in pen.
–	–	–	Fixed value	3 digits after decimal point -10000000000.000 to 10000000000.000	Configurable when "Fixed value" is selected for mode in error mode for PEN128 in pen.
–	–	–	Fixed characters	8 characters	Configurable when "Fixed charac- ters" is selected for mode in error mode for PEN1 in pen.
Mial template No. 1 - 32	–	–	–	Integer (hexadecimal), bit, Disable when 0, Report when 1	
Mial template No. 33 - 64	–	–	–		
Mial template No. 65 - 96	–	–	–		
Mial template No. 97 - 128	–	–	–		
Timing to send mails	Daily report	–	–	"Disable" "Upon updating of file", "Upon saving file"	
–	Monthly report	–	–	"Disable" "Upon updating of file", "Upon saving file"	
–	Yearly report	–	–	"Disable" "Upon updating of file", "Upon saving file"	

1st column Item 1	2nd column Item 2	3rd column Item 3	4th column Item 4	5th column Setting data	Remarks
Daily report start time	–	–	–	Integer 1 to 24	
Monthly report start date	–	–	–	Integer 1 to 28	
Yearly report start month	–	–	–	Integer 1 to 12	

3.7 Scheduler

Outputs setting parameters as columns and setting data as rows.
For pattern setting, outputs pattern No. as rows, and for unit setting, outputs setting data of each unit as rows.

E.g. Pattern.csv

```
,,,No.1,...,No.64,
 Pattern name,,M-System,...,DL30,
No.1,type,,MD,...,DO,
,CH,,1,...,10,
,Start at,Hour,8,...9,
,,Minute,30,...,0,
,End at,Hour,17,...,17,
,,Minute,30,...,0,
...
No.8,Type,,GDO,...,MD,
...
```

3.7.1 Pattern Setting

File name: Pattern.csv

Setting is same as DL30GCFG [Record] -> [Pattern Setting]. Details are as following list.

Table 35. Pattern Setting

1st column Item 1	2nd column Item 2	3rd column Item 3	4th to 67th column Setting data	Remarks
– (blank)	–	–	(No.) No.01 to No.64	
Pattern name	–	–	32 characters	
No.1	Type	–	"None", "DO", "GDO", "MD"	Items No.1 and after are blank when "None" is selected.
–	CH	–	CH No. corresponding to the type	
–	Start at	Hour	Integer 0 to 23	
–	–	Min.	Integer 0 to 59	
–	End at	Hour	Integer 0 to 23	
–	–	Min.	Integer 0 to 59	
–	–	–		No.2 to No.7 Same as No.1
No.8	Type	–		Items No.8 and after are blank when "None" is selected.
–	CH	–		
–	Start at	Hour	Integer 0 to 23	
–	–	Min.	Integer 0 to 59	
–	End at	Hour	Integer 0 to 23	
–	–	Min.	Integer 0 to 59	

3.7.2 Schedule Unit Setting

File name: Unit.csv

Setting is same as DL30GCFG [Record] -> [Schedule Unit Setting]. Details are as following list.

Table 36. Schedule Unit Setting

1st column Item 1	2nd column Item 2	4th to 67th columns Setting data	Remarks
– (blank)	–	(No.) No.01 to No.32	
Mode	–	"Enable", "Disable"	Following all items are blank when "Disable" is selected.
Unit name	–	32 characters	
Basic assignment	Sun	"None" or integer 1 to 64	
–	Mon		
–	Tue		
–	Wed		
–	Thu		
–	Fri		
–	Sat		

3.7.3 Maintenance SW Setting

File name: Mainte.csv

Setting is same as DL30GCFG [Record] -> [Maintenance SW Setting]. Details are as following list.

Table 37. Maintenance SW Setting

1st column Item 1	2nd column Item 2	4th to 67th columns Setting data	Remarks
Channel	Type	"None", "DI", "MD"	CH is blank when "None" is selected.
– (blank)	CH	CH No. corresponding to the type	

.

3.8 Process Operation Monitor

Outputs setting parameters as columns and setting data as rows.
Outputs pattern setting data of each process No. as rows.

E.g. Opemon.csv

```
,,,Process1,...,Process 32,
 Pricess name,,M-System,...,DL30,
Channel 1,Type,DI,...,AI
,CH,1,...,5
Channel 2,Type,MD,...,,
,CH,1...,,
...
Digital display (main),Type,AI,...,,
,CH,1,...,,
Digital display (sub1),Type,MD,...AI,
,CH,2,...,2,
...
```

File name: Opemon.csv
Setting is same as DL30GCFG [Process Operation Monitor]. Details are as following list.

Table 38. Process Operation Monitor Setting

1st column Item 1	2nd column Item 2	3rd to 34th column Setting data	Remarks
– (blank)	–	(No.) Process 1 to Process 32	
Process name	–	32 characters	
Channel 1	Type	"None", "AI", "PI", "MA", "DI", "MD"	Following items are blank when "None" is selected. Channel 2 to 5 and Digital display (main) are blank when "AI", "PI", or "MA" is selected.
–	CH	CH No. corresponding to the type	
Channel 2	Type	"None", "DI", "MD"	Configurable when "DI", or "MD" is selected for type for channel 1. Items for channel 3 to 5 are blank when "None" is selected.
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for channel 2.
Channel 3	Type	"None", "DI", "MD"	Configurable when "DI", or "MD" is selected for type for channel 1, and other than "None" is selected for type for channel 2.
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for channel 3.
Channel 4	Type	"None", "DI", "MD"	Configurable when "DI", or "MD" is selected for type for channel 1, and other than "None" is selected for type for channel 2 and 3.
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for channel 4.
Channel 5	Type	"None", "DI", "MD"	Configurable when "DI", or "MD" is selected for type for channel 1, and other than "None" is selected for type for channel 2 to 4.
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for channel 5.
Digital display (main)	Type	"None", "AI", "PI", "MA"	Configurable when "DI" or "MD" is selected for type for channel 1.
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for digital display (main).
Digital display (sub1)	Type	"None", "AI", "PI", "MA", "DI", "MD"	
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for digital display (sub1).
Digital display (sub2)	Type	"None", "AI", "PI", "MA", "DI", "MD"	
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for digital display (sub2).
Digital display (sub3)	Type	"None", "AI", "PI", "MA", "DI", "MD"	
–	CH	CH No. corresponding to the type	Configurable when other than "None" is selected for type for digital display (sub3).

4. REFERENCE MATERIALS

4.1 Acceptable Number of Characters

Acceptable number of characters is written on a assumption that single-byte characters and double-byte characters are mixed.

Double number of characters can be set if the all characters are written with single-byte characters (ASCII).