

General Specifications

Model LHS6510 Long-term Data Archive Package



GS 33K05J10-50E

[Release 5]

■ GENERAL

The long-term data archive is intended for the long-term storage of trend data, closing data, historical messages, and CAMS for HIS historical data.

LHS6510 Long-term Data Archive Package is an optional software package used with Standard Operation and Monitoring Function.

■ FUNCTION SPECIFICATIONS

● Stored Data

The following four types of data can be stored in the long-term data archive:

- Continuous-rotary Type Trend data to which the pen is assigned in Trend Acquisition Pen Assignment Builder
- Closing data for which closing processing is specified in Trend Acquisition Pen Assignment Builder
- All historical messages acquired through message processing
- Historical alarm and event message data acquired by CAMS for HIS

Data type	Storage unit for long-term data	Storage destination for long-term data (*1)	Storage period set in the builder
Trend data	Trend block unit	Local disk	Number of days (*2)
Closing data	All hourly closing data	Local disk	Number of years (*2)
	All daily closing data	Local disk	Number of years (*2)
	All monthly closing data	Local disk	Number of years (*2)
Historical message	All messages	Local disk	Number of days (*2)
CAMS for HIS historical data	All historical data	Local disk or network drive (*3)	No setting is required (*4)

*1: External storage media, such as USB and MO disks, cannot be used to store the long-term data.

*2: Specify the storage period beforehand. The oldest long-term data that has exceeded the storage period in the long-term data archive is replaced by the newly added long-term data. A database for stored data for each storage period specified in the builder is created on the HIS. (It is not created if the available HIS hard disk space is less than 5 %.)

*3: It is recommended to create a dedicated volume for the long-term storage to store the CAMS for HIS historical data.

*4: The storage period does not need to be specified. New messages will be stored as long as space is available for the storage volume. If the available disk space is less than 5 %, a new message will not be stored. It is possible to set an alarm to be generated when the 5 % limit is reached.

● Referencing Long-term Data

The long-term data managed by Long-term Data Archive Package can be accessed from Trend View, the Historical Message Report window; and Historical Viewer of CAMS for HIS. The trend data, closing data, and historical messages can also be accessed from Report Package or application programs via OPC interface.

● Archive/Retrieve

The archive/retrieve function allows the user to archive the trend data, closing data, and historical messages stored on the HIS local hard disk to the external storage media, and retrieving the data stored on the external storage media to the HIS local hard disk. The operation history is recorded in a log file and can be viewed in a dialog box.

■ OPERATING ENVIRONMENT

● Hardware Requirement

Conforms to operating environment of LHS1100/LHM1101 Standard Operation and Monitoring Function.

However, the disk space listed below is required for the long-term data storage.

Trend Data, Closing Data, and Historical Messages

The disk space required for the long-term data storage varies depending on the number of data points, data sampling period, and the number of days for storage.

Type and number of data	Sampling period	Formula for calculating disk space (file size x number of files)	Data storage per file
For 128 samples (1 block) of trend data	1 second	10.8 MB x (Number of days of data storage x 8 + 1)	3 hours
	10 seconds	10.8 MB x (Number of days of data storage + 1)	1 day
	1 minute	10.8 MB x {(Number of days of data storage + 13) / 7} (*1)	7 days
	2 minutes	10.8 MB x {(Number of days of data storage + 27) / 14} (*1)	14 days
	5 minutes	10.8 MB x {(Number of days of data storage + 69) / 35} (*1)	35 days
	10 minutes	10.8 MB x {(Number of days of data storage + 139) / 70} (*1)	70 days
For 1 point of closing data	Hourly closing	0.56 MB x (Number of years of data storage + 1)	—
	Daily closing	0.56 MB x {(Number of years of data storage + 3) / 2} (*1)	—
	Monthly closing	0.56 MB x {(Number of years of data storage + 19) / 10} (*1)	—
Historical message	-	0.5 MB x Number of days of data storage (*2)	—

*1: An integral multiple of file size. The result of the calculation in braces is rounded down to a whole number and multiplied by the file size.

*2: The size of each historical message is different. Calculation is performed on the assumption that the file size is 0.5 MB per day.

The following example shows how to calculate the disk space to store 256 data samples (2 blocks) acquired with a 1 minute sampling period for 30 days.

First calculate the number of files $(30 + 13) / 7$, and then round down the result of 6.14 to the whole number 6. The space required for storing one block is $10.8 \times 6 = 64.8$ MB, and the space for storing two blocks is $64.8 \times 2 = 129.6$ MB.

CAMS for HIS historical data

More than 50 GB of disk space is required for the CAMS for HIS historical data. For example, about 128 MB of space is required to store 100000 A&E messages. It is recommended to create a volume for the long-term storage that is separate from the volume on which the OS or CENTUM VP is installed.

The size of each A&E message is different. The following example shows the storage period under the assumption that message No. 1101 "Input process alarm generation" is generated regularly.

Disk space	One message per second	One message every 2 seconds	One message every 4 seconds
50 GB	About 1 year and 1 month	About 2 years and 3 months	About 4 years and 7 months
100 GB	About 2 years and 3 months	About 4 years and 7 months	About 9 years and 3 months

● Software Requirement

Conforms to operating environment of LHS1100/LHM1101 Standard Operation and Monitoring Function.

Necessary Software:

LHS1100 LHM1101 Standard Operation and Monitoring Function

■ MODEL AND SUFFIX CODES

		Description
Model	LHS6510	Long-term Data Archive Package [Media model: LHSKM50-V11]
Suffix Codes	-V	Software License
	1	Always 1
	1	English-language version

■ ORDERING INFORMATION

Specify model and suffix codes.

■ TRADEMARKS

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