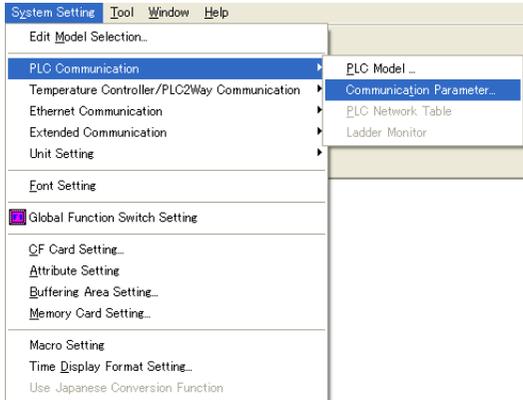
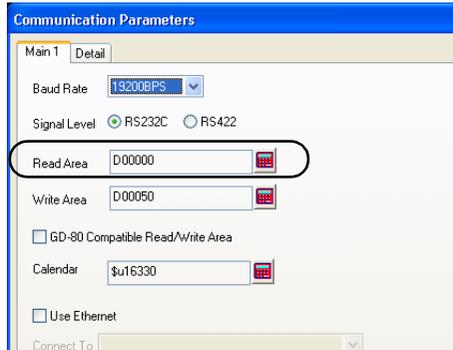


Sample Control Memory

Sampling control memory is automatically allocated for a maximum of 3 words following the read area “n + 3” (specified by selecting [System Setting] → [PLC Communication] → [Communication Parameter]) when Use Sample Buffer is checked in the [Buffering Area Setting] dialog. Regardless of the setting for Memory Designation, the sample control memory is allocated following read area “n + 3”.



Example:
The top memory address of the sample control memory will be D3 (= read area n + 3) in the following case:



- * The number of words allocated for the sample control memory depends on the number of buffers to be used. (Refer to the illustration below.)
- When Use Sample Buffer is not checked, memory addresses from “n + 3” are not used.
- * Be sure to reset the bits not in use to “0” in the sample control memory.

MSB											LSB								
15	14	13	12	11	10	09	08	07	06	05	04	03	02	01	00				
U	S	R	T	U	S	R	T	U	S	R	T	U	S	R	T				
Sample control memory																			
= Read area n + 3				Buffer No. 3				Buffer No. 2				Buffer No. 1				Buffer No. 0			
n + 4				Buffer No. 7				Buffer No. 6				Buffer No. 5				Buffer No. 4			
n + 5				Buffer No. 11				Buffer No. 10				Buffer No. 9				Buffer No. 8			

T: Trigger

This is valid only when [Bit Synchronization] is selected for [Sampling Method]. Data is sampled from the specified buffer at the edge of [0 → 1].

R: Reset

When this bit is set (1), data in the specified buffer is cleared and no sampling occurs. When this bit is reset (0), sampling is started. (This is not valid when [Time Order Alarming] is selected for [Sampling Method].)

S: Normal operation bit

This is valid only when [Alarm Function] is selected for [Sampling Method]. This bit controls alarm tracking. When an error bit is reset, this bit is set. When an error bit is set, this bit is reset. The first error bit that is set while this bit is reset is recognized as the “primary cause” error, and can be distinguished from the other errors. (or more information on the alarm function, refer to “10.3 Alarm Tracking (Historical).”)

U: Sampling bit/start bit

When [Use Start Bit] is checked for the case other than [Sampling Method: Alarm Function], sampling is started with the bit ON and is stopped with the bit OFF.

When [Sampling Method: Alarm Function] is selected, this bit remains ON from the start to the end of sampling.

*** When this bit is not ON, no error message is displayed even if the error bit is set.**

Calculating Buffering Area Size

Depending on the setting for [Sampling Method] and [Store Target], the buffering area size varies. Calculate the required size as below.

Storage target: Internal buffer (32 k words max.)

(Unit: words)

Sampling Method	Calculation
Bit Synchronization	$(\text{Word Count} + 2) \times \text{No. of Samples}$
Constant Sampling	$(\text{Word Count} + 2) \times \text{No. of Samples}$
Alarm Logging	$3 \times \text{No. of Samples}$
Time Order Alarming	$48 \times \text{Word Count}$
Alarm Function	$3 \times \text{No. of Samples}$
Temp. CTRL Network/PLC2Way	$(\text{Word Count} * + 2) \times \text{No. of Samples}$

* [Word Count] for the temperature control network/PLC2way table denotes the number of words for the memory used for the temperature control network/PLC2way table that is set for [Table No.] in the [Buffering Area Setting] dialog.

Store Target: SRAM

Refer to page A1-20.

Store Target: CF Card

Refer to page A1-30.