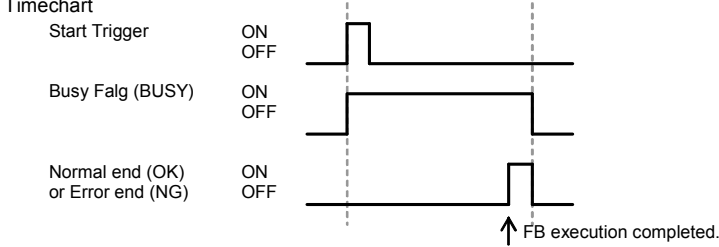


CompoNet -220	Read Operation Time Monitor Peak Value Read: _CompoNet220_GetOperationTime_Peak
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Basic function	Reads the peak values for operation times from slaves connected to CompoNet.																																								
Symbol		<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%; padding: 2px;">_CompoNet220_GetOperationTime_Peak (BOOL)</td> <td style="width: 30%; padding: 2px;">(BOOL)</td> <td style="width: 40%;"></td> </tr> <tr> <td style="padding: 2px;">EN</td> <td style="padding: 2px;">ENO</td> <td></td> </tr> <tr> <td style="padding: 2px;">(INT)</td> <td style="padding: 2px;">(BOOL)</td> <td style="padding: 2px;">Busy Flag</td> </tr> <tr> <td style="padding: 2px;">MasterUnitNo</td> <td style="padding: 2px;">BUSY</td> <td></td> </tr> <tr> <td style="padding: 2px;">(INT)</td> <td style="padding: 2px;">(BOOL)</td> <td style="padding: 2px;">Normal end</td> </tr> <tr> <td style="padding: 2px;">NodeNo</td> <td style="padding: 2px;">OK</td> <td></td> </tr> <tr> <td style="padding: 2px;">(INT)</td> <td style="padding: 2px;">(BOOL)</td> <td style="padding: 2px;">Error end</td> </tr> <tr> <td style="padding: 2px;">Number</td> <td style="padding: 2px;">NG</td> <td style="padding: 2px;">Operation time monitor peak value</td> </tr> <tr> <td style="padding: 2px;">(INT)</td> <td style="padding: 2px;">(UINT)</td> <td style="padding: 2px;">Peak</td> </tr> <tr> <td style="padding: 2px;">NodeType</td> <td style="padding: 2px;">Peak</td> <td style="padding: 2px;">FINS error code (May be omitted.)</td> </tr> <tr> <td></td> <td style="padding: 2px;">(WORD)</td> <td style="padding: 2px;">FINSError</td> </tr> <tr> <td></td> <td style="padding: 2px;">(WORD)</td> <td style="padding: 2px;">Explicit message error code (May be omitted.)</td> </tr> <tr> <td></td> <td style="padding: 2px;">ExplicitError</td> <td></td> </tr> </table>	_CompoNet220_GetOperationTime_Peak (BOOL)	(BOOL)		EN	ENO		(INT)	(BOOL)	Busy Flag	MasterUnitNo	BUSY		(INT)	(BOOL)	Normal end	NodeNo	OK		(INT)	(BOOL)	Error end	Number	NG	Operation time monitor peak value	(INT)	(UINT)	Peak	NodeType	Peak	FINS error code (May be omitted.)		(WORD)	FINSError		(WORD)	Explicit message error code (May be omitted.)		ExplicitError	
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File name	Lib\FBL\omronlib\RemoteIO\CompoNet_CompoNet220_GetOperationTime_Peak10.cxf																																								
Applicable models	Applicable Master Units	CS1W-CRM21 and CJ1W-CRM21																																							
	Applicable Slave Units	CRT1-ID16, CRT1-OD16, CRT1B-ID02S, CRT1B-OD02S CRT1B-ID02SP, CRT1B-OD02SP, CRT1B-ID04SP, CRT1B-MD04SLP																																							
	CPU Unit	CS1*-CPU**H Unit version 3.0 or higher CJ1*-CPU**H Unit version 3.0 or higher CJ1M-CPU** Unit version 3.0 or higher CP1H																																							
	CX-Programmer	Version 5.0 or higher.																																							

<p>Conditions for usage</p>	<p>External Connections</p> <p>1. Conditions for Usage</p> <p>(1) CRT1-ID16(-1) IN0 to IN8, IN1 to IN9, IN2 to IN10, ..., IN7 to IN15</p> <p>(2) CRT1-ID16(-1)+XWT-ID08(-1) IN0 to IN16, IN1 to IN17, IN2 to IN18, ..., IN7 to IN23</p> <p>(3) CRT1-ID16(-1)+XWT-ID16(-1) IN0 to IN24, IN1 to IN25, IN2 to IN26, ..., IN7 to IN31</p> <p>(4) CRT1-OD16(-1) OUT0 to OUT8, OUT1 to OUT9, OUT2 to OUT10, ..., OUT7 to OUT15</p> <p>(5) CRT1-OD16(-1)+XWT-OD08(-1) OUT0 to OUT16, OUT1 to OUT17, OUT2 to OUT18, ..., OUT7 to OUT23</p> <p>(6) CRT1-OD16(-1)+XWT-OD16(-1) OUT0 to OUT24, OUT1 to OUT25, OUT2 to OUT26, ..., OUT7 to OUT31</p> <p>(7) CRT1-ID16(-1)+XWT-OD08/16(-1) CRT1-OD16(-1)+XWT-ID08/16(-1) OUT0 to IN0, OUT1 to IN1, OUT2 to IN2, ..., OUT7 to IN7</p> <p>(8) CRT1B-ID02S(-1) CRT1B-ID02SP(-1) IN0 to IN1</p> <p>(9) CRT1B-IN04SP(-1) IN0 to IN2, IN1 to IN3</p> <p>(10) CRT1B-OD02S(-1) CRT1B-OD02SP(-1) OUT0 to OUT1</p> <p>(11) CRT1B-MD04SLP(-1) OUT0 to IN0 OUT1 to IN1</p> <ul style="list-style-type: none"> The I/O bit combinations for which to measure the operation time and ON/OFF edges can be selected. <p>Note: Refer to the <i>CompoNet Slave Units and Repeater Unit Operation Manual (W457)</i> for details. Note: The conditions shown above are the default conditions.</p> <p>2. Time Accuracy</p> <p>Accuracy for measurements in milliseconds: (6 ms)</p> <p>CPU Unit Settings</p> <p>PLC Setup: Shared Settings for Communications Instructions in FBs</p> <ul style="list-style-type: none"> CompoNet Response Timeout Time (default: 2 s) 10 s recommended Number of retries (default: 0) <p>Shared Resources</p> <ul style="list-style-type: none"> Communications ports (internal logical ports) <p>Other</p> <ul style="list-style-type: none"> Communications must be within one network and cannot cross to another network.
<p>Function description</p>	<p>The peak value of the operation time monitor is read from the CompoNet slave specified by the Master Unit No., the Slave Node Address and the Slave Type. Refer to the FINS error code and explicit message error code if an error occurs. Both error codes will be output as #0000 for a normal end.</p>
<p>FB precautions</p>	<ul style="list-style-type: none"> The FB is processed over multiple cycles. The BUSY output variable can be used to check whether the FB is being processed. OK or NB will be turned ON for one cycle only after processing is completed. Use these flags to detect the end of FB processing. <p>Timechart</p> 
<p>EN input condition</p>	<p>Connect EN to an OR between an upwardly differentiated condition for the start trigger and the BUSY output from the FB.</p>
<p>Restrictions Input variables</p>	<ul style="list-style-type: none"> Always use an upwardly differentiated condition for EN. If the input variables are out of range, the ENO Flag will turn OFF and the FB will not be processed.
<p>Output variables</p>	<ul style="list-style-type: none"> This FB requires multiple cycles to process. Always connect an OR including the BUSY output variable to the EN input variable to ensure that the FB is processed to completion (see <i>Symbol</i>). Do not turn the BUSY output variable ON or OFF outside the FB.

<p>Application example</p>	<p>When bit A turns ON, the peak of the operation time monitor of the slave with the specified node address, 15, will be read. The result, #200, is stored in D0.</p>
<p>Related manuals</p>	<p>Explicit Message Error Codes <i>CompoNet Slave Units and Repeater Unit Operation Manual (W457)</i> <i>Appendix A CompoNet Explicit Messages, Basic Format of Explicit Messages, List of Error Codes</i> FINS Error Codes <i>Communications Commands Reference Manual (W342)</i> <i>5-1-3 Error Codes</i></p>

Variable Tables**Input Variables**

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1 (ON): FB started. 0 (OFF): FB not started.
Master Unit No.	MasterUnitNo	INT	&0	&0 to &99 � to ?	Specify the unit number of the CompoNet Master Unit.
Slave node address	NodeNo	INT	&0	&0 to &127	Specify the node address of the slave.
Registered No.	Number	INT	&0	&0 to &7	Specify the registered number.
Slave Type	NodeType	INT	&1	&1 to &6	Slave Type 1: Word Slave IN 2: Word Slave OUT 3: Word Slave MIX 4: Bit Slave IN 5: Bit Slave OUT 6: Bit Slave MIX

Output Variables

Name	Variable name	Data type	Range	Description
ENO (May be omitted.)	ENO	BOOL		1 (ON): FB processed normally. 0 (OFF): FB not processed or ended in an error.
Busy Flag	BUSY	BOOL		Automatically turns OFF when processing is completed.
Normal end	OK	BOOL		Turns ON for one cycle when processing ends normally.
Error end	NG	BOOL		Turns ON for one cycle when processing ends in an error.
Operation time monitor peak value	Peak	UINT	&0 to &65535	The peak value of the operation time monitor is output. (Unit: ms) For example, &200 would be output for 200 ms.
FINS error code (May be omitted.)	FINSError	WORD		The FINS error code is output. A code of #0000 is output for a normal end. Refer to the Related Manuals for details on the error codes.
Explicit message error code (May be omitted.)	ExplicitError	WORD		Outputs the explicit message error code. A code of #0000 is output for a normal end. Refer to the Related Manuals for details on the error codes.

Version History

Version	Date	Contents
1.00	2006.9.	Original production

Note

This manual is a reference that explains the function block functions.

It does not explain the operational limitations of Units, components, or combinations of Units and components. Always read and understand the Operation Manuals for the system's Units and other components before using them.