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| CompoNet -210 | Read Maintenance Counter Status: _CompoNet210_GetCounter_Stat |
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| Basic function | Reads maintenance counter status from slaves connected to CompoNet. | |
| Symbol | | |
| File name | Lib\FBL\omronlib\RemoteIO\CompoNet_CompoNet210_GetCounter_Stat10.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. |
| Conditions for usage | <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. | |
| Function description | <p>The status of the maintenance counter is read from the CompoNet slave specified by the Master Unit No., the Slave Node Address and the Slave Type.</p> <p>Refer to the FINS error code and explicit message error code if an error occurs.</p> <p>Both error codes will be output as #0000 for a normal end.</p> | |
| FB precautions | <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> | |
| EN input condition | Connect EN to an OR between an upwardly differentiated condition for the start trigger and the BUSY output from the FB. | |
| Restrictions Input variables | <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. | |
| Output variables | <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. | |

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| <p>Application example</p> | <p>When bit A turns ON, the status of the maintenance counter of the slave with the specified node address, 15, will be read. As the results, #0000000000001234 is stored in D0 to D3.</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></p> <p>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 #0 to #63 | 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. |
| Slave Type | NodeType | INT | &1 | &1 to &7 | 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 7: Repeater |

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. | | | | | | | | |
| Maintenance counter status | Stat | LWORD | | <p>The status of the maintenance counter is output. The status is whether the specified total ON time or the number of operations has been exceeded.</p> <p>Input unit</p> <p style="text-align: center;">+1 CH +0 CH</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">IN31-16</td> <td style="width: 50px; text-align: center;">IN15-0</td> </tr> </table> <p>Output unit</p> <p style="text-align: center;">+1 CH +0 CH</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">OUT31-16</td> <td style="width: 50px; text-align: center;">OUT15-0</td> </tr> </table> <p>Mix unit</p> <p style="text-align: center;">+1 CH +0 CH</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 50px; text-align: center;">OUT15-0</td> <td style="width: 50px; text-align: center;">IN15-0</td> </tr> </table> <p>Mix unit (4 bit)</p> <p style="text-align: center;">+1 CH +0 CH</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td style="width: 30px; text-align: center;">OUT1-0</td> <td style="width: 30px; text-align: center;">IN1-0</td> </tr> </table> <p>0 (OFF): Within specified range 1 (ON): Out of range</p> | IN31-16 | IN15-0 | OUT31-16 | OUT15-0 | OUT15-0 | IN15-0 | OUT1-0 | IN1-0 |
| IN31-16 | IN15-0 | | | | | | | | | | | |
| OUT31-16 | OUT15-0 | | | | | | | | | | | |
| OUT15-0 | IN15-0 | | | | | | | | | | | |
| OUT1-0 | IN1-0 | | | | | | | | | | | |
| 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.