YASKAWA

# YASKAWA AC Drive GA501 Communication Protocol PROFINET Supplemental Technical Manual

## Introduction

This supplemental technical manual describes the functions added with a GA501 communication software upgrade S8212(PROFINET:Ver5006)※1. Read this supplement to make sure that you use the GA501 correctly. Read this manual together with the "Quick Start Guide (TOEP C710617 4X)" that is included with the product and the "GA501 PROFINET Technical Reference (SIEP C710617 4T)" that you can find on our documentation website. Always observe the safety messages and precautions to make sure that you are using the product correctly.

※1: The GA501 has an overall communication software version and a separate software version for each communication protocol. Check the COM.PRG number on the purchased box for the overall software version. Start the PROFINET communication protocol, and view monitor U6-97 to check the PROFINET software version.

## Modified Contents

This supplemental manual explains newly added functions.

1. Support for Multifunction I/O Control via PROFIdrive

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# 1. Support for Multifunction I/O Control via PROFIdrive

Multifunctional digital input/output bits have been assigned to the Control Word (STW) and Status Word (ZSW) in PROFIdrive. When using the PROFIdrive communication profile, the multifunctional digital input/output functions can be controlled/monitored via the network.

Control Word(STW)

| Bit | Name | Value | Description |
|---|---|---|---|
| 11 | Multi-Function Digital Input 3 (Ethernet DI3)※1 | 1 | Enables the function set in H1-03. |
| | | 0 | Disables the function set in H1-03. |
| 12 | Multi-Function Digital Input 4 (Ethernet DI4)※1 | 1 | Enables the function set in H1-04. |
| | | 0 | Disables the function set in H1-04. |
| 13 | Multi-Function Digital Input 5 (Ethernet DI5)※1 | 1 | Enables the function set in H1-05. |
| | | 0 | Disables the function set in H1-05. |
| 14 | Multi-Function Digital Input 6 (Ethernet DI6)※1 | 1 | Enables the function set in H1-06. |
| | | 0 | Disables the function set in H1-06. |
| 15 | Multi-Function Digital Input 7 (Ethernet DI7)※1 | 1 | Enables the function set in H1-07. |
| | | 0 | Disables the function set in H1-07. |

※1…Supported from software version PRG: 5006 and later. For PROFINET software versions, refer to U6-97 [OPT SPARE 4].

Status Word(ZSW)

| Bit | Name | Value | Description |
|---|---|---|---|
| 11 | Multi-Function Digital Output 1 (Ethernet DO1)※1 | 1 | The function set in parameter H2-01 is enabled. |
| | | 0 | The function set in parameter H2-01 is disabled. |
| 12 | Multi-Function Digital Output 2 (Ethernet DO2)※1 | 1 | The function set in parameter H2-02 is enabled. |
| | | 0 | The function set in parameter H2-02 is disabled. |
| 13 | Multi-Function Digital Output 3 (Ethernet DO3)※1 | 1 | The function set in parameter H2-03 is enabled. |
| | | 0 | The function set in parameter H2-03 is disabled. |

※1…Supported from software version PRG: 5006 and later. For PROFINET software versions, refer to U6-97 [OPT SPARE 4].