User's Manual

YFGW410 Field Wireless Management Station

Read Me First

IM 01W02D01-11EN

This document specifies the important information to use this product correctly and safely and the License Agreement of Attached Software for YFGW410 Field Wireless Management Station.

Before use the product, be sure to read this document first.

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YOKOGAWA
Yokogawa Electric Corporation

IM 01W02D01-11EN
8th Edition

Introduction

This manual (IM 01W02D01-11EN) describes the safety precautions, explosion protected type specifications and the license agreement of attached software for the YFGW410.

There are three documents including this one for the YFGW410 listed below. Read them along with this manual.

Document No.	Document name	Description
IM01W02D01-01EN	YFGW410 Field Wireless Management Station	This manual is stored in the attached DVD-ROM for YFGW410. It describes installation, wiring, operation, maintenance and specification of the YFGW410.
IM01W02D01-11EN	YFGW410 Field Wireless Management Station Read Me First	This manual. It describes the safety precaution, explosion protected type specifications and the license agreement of the attached software for the YFGW410.
IM 01W02D01-21EN	YFGW410 PROFINET Interface	This manual is stored in the attached DVD-ROM for YFGW410. It describes operation and specification of the YFGW410 PROFINET Interface.
GS01W02D1-01EN	YFGW410 Field Wireless Management Station	Product specification including detailed model and suffix code, optional specifications and accessory of YFGW410.

■ Regarding This User's Manual

- **This manual should be provided to the end user. Please recommend end users to keep this manual at hand and refer to it as needed.**
- **This manual and the identification tag attached on packing box are essential parts of the product; keep them in a safe place for future reference.**
- **Before use, read this manual thoroughly to comprehend its contents.**
- **The purpose of the User's Manual is to describe details of functions provided in this product, not to warrant the product's suitability to the specific purposes of customers.**
- **No part of this manual may be reproduced in any form without Yokogawa's written permission.**
- **The contents of this manual may be changed without prior notice.**
- **All reasonable effort has been made to ensure the accuracy of the contents of this manual. However, if any errors or omissions are found, please inform any of sales offices listed on the back cover or your local distributor.**
- **The specifications covered by this manual are limited to those for the standard type under the specified model number break-down and do not cover custom-made instruments. When products whose suffix code or optional codes contain code "Z" and an exclusive document is attached, please read it along with this manual.**
- **Please note that this User's Manual may not be revised for any specification changes, construction changes or operating part changes that are not considered to affect function or performance.**

8th Edition: July 2021 (YK)

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Safety Precautions

Safety, Protection, and Modification of the Product

- **In order to protect the operator, product, and system controlled by the product, observe the safety precautions described in this User's Manual. If users handle contrary to these instructions, we can not guarantee the safety.**
- **If this instrument is used in a manner not specified in this User's Manual, the protection provided by this instrument may be impaired.**
- **Modification of the product is strictly prohibited.**
- **If customers attempt to repair or modify explosion protected type products and fail to return them to their original state, the explosion protected structure of this product will be lost, resulting in a hazardous state. All repairs and modifications of the product must be consulted with Yokogawa.**
- **If any protection or safety circuit is required for the system controlled by the product or for the product itself, prepares it separately.**
- **Be sure to use the spare parts approved by Yokogawa Electric Corporation (hereafter simply referred to as Yokogawa) when replacing parts or consumables.**
- **The following symbols are used in the product and User's Manual to indicate that there are precautions for safety:**



CAUTION

Indicates that caution is required for operation. This symbol is placed on the parts necessary to refer to the User's Manual for protecting the operator and equipment. In the User's Manual you will find precautions to avoid physical injury or death of the operator, including electrical shocks, injuries of human body, and so on.



WARNING

Indicates instructions that must be observed in order to prevent the software or hardware from being damaged or the system from becoming faulty.



IMPORTANT

Indicates important information required to understand operations or functions.

NOTE

Draws attention to information essential for understanding the operation and features.

TIP

Indicates additional information.

SEE ALSO

Indicates a source to refer to

⏚ Indicates a protective grounding terminal. Before using the product, ground the terminal.

⏚ Indicates a functional grounding terminal. Before using the product, ground the terminal.

⎓ Indicates a DC supply

Safe Use of This Product

This product is designed to be used by a person with specialized knowledge. For the safety of the operator and to protect this product and the system, please be sure to follow this manual's safety instructions when handling this product. If these instructions are not heeded, the protection provided by this product may be impaired. In this case, Yokogawa cannot guarantee that this product can be safely operated. Please pay special attention to the following points:

(a) Installation

- This instrument may only be installed by an engineer or technician who has an expert knowledge of this device. Operators are not allowed to carry out installation unless they meet this condition.
- All installation shall comply with local installation requirements and the local electrical code.

(b) Wiring

- The instrument must be installed by an engineer or technician who has an expert knowledge of this instrument. Operators are not permitted to carry out wiring unless they meet this condition. All installation shall comply with local installation requirements and the local electrical code.

(c) Operation

CAUTION

When ambient temperature is beyond 50°C, a temperature of the surface is very high. Please be careful not to touch with bare hands.

(d) Maintenance

- Please carry out only the maintenance procedures described in this manual. If you require further assistance, please contact the nearest Yokogawa office.

(e) Explosion Protected Instrument

- Users of explosion protected instruments should refer first to “Explosion Protected type Specification” section of this manual.
- The use of this instrument is restricted to those who have received appropriate training in the device.
- Take care not to create sparks when accessing the instrument or peripheral devices in a hazardous location.
- Repair or modification to this instrument by customer will cause malfunction of explosion protect function and hazardous situation. If you need to repair or modification, please contact the nearest Yokogawa office.

(f) Modification

- Yokogawa will not be liable for malfunctions or damage resulting from any modification made to this instrument by the customer.

(g) Product Disposal

- The instrument should be disposed of in accordance with local and national legislation/ regulations.
- Batteries are included in this product. Batteries in this product cannot be removed by yourself. Dispose of them together with this product.
- The following is an explanation about the new EU Battery Directive (DIRECTIVE 2006/66/ EC). This directive is only valid in the EU.
- If you dispose of this product within the EU, contact your local Yokogawa Europe B.V. office. Do not dispose of them as domestic household waste.
  Battery type: lithium thionyl chloride primary battery



CAUTION

The symbol (see above) means they shall be sorted out and collected as ordained in ANNEX II in DIRECTIVE 2006/66/EC.

(h) Authorized Representative in EEA

- The Authorized Representative for this product in the EEA is:
  Yokogawa Europe B.V.
  Euroweg 2, 3825 HD Amersfoort, The Netherlands

Warranty

- The warranty terms of this instrument are described in the quotation. We will make any repairs that may become necessary during the guaranteed term free of charge.
- Please contact our sales office or your local distributor if this instrument requires repair.
- If the instrument is faulty, contact us with complete details about the problem and the length of time it has been faulty, and state the model and serial number. We would appreciate the inclusion of drawings or additional information.
- The results of our examination will determine whether the product will be repaired free of charge or on an at-cost basis.

The guarantee will not apply in the following cases:

- Damage due to negligence or insufficient maintenance on the part of the customer.
- Problems or damage resulting from handling, operation or storage that violates the intended use and specifications.
- Problems that result from using or performing maintenance on the instrument in a location that does not comply with the installation location specified by Yokogawa.
- Problems or damage resulting from repairs or modifications not performed by Yokogawa or someone authorized by Yokogawa.
- Problems or damage resulting from inappropriate installation after delivery.
- Problems or damage resulting from disasters such as fires, earthquakes, storms, floods, or lightning strikes and external causes.

Warranty and Disclaimer

- Yokogawa assumes no responsibilities for this product except as stated in the warranty.
- Yokogawa shall have neither liability nor responsibility to any person or entity with respect to any direct or indirect loss or damage arising from using the product or any defect of the product that Yokogawa can not predict in advance.

Notes on Hardware

Appearance and Accessories

Check the following when you receive the product:

- Appearance
- Standard accessories

Contact our sales representative or your local distributor if the product's coating has come off or any accessories are missing.

Model and Suffix Codes

The name plate on the product contains the model and suffix codes. Verify that the specification indicated in the "MODEL AND SUFFIX CODES" and "OPTIONAL SPECIFICATIONS" in General Specifications "GS 01W02D01-01EN" is in compliance with the specifications written on the order sheet. If you have any questions, contact our sales office or your local distributor.

Transportation of products contains lithium batteries:

This product contains lithium batteries. Primary lithium batteries are subject to transportation regulations by the U.S. Department of Transportation, and are also covered by the International Air Transport Association (IATA), the International Civil Aviation Organization (ICAO), and the European Ground Transportation of Dangerous Goods (ARD). It is the responsibility of the shipper to ensure compliance with these or any other local requirements. Consult current regulations and requirements regarding lithium batteries before shipping.

Notes on Attached Software

Before opening the media package, read YFGW410 Software License Agreement. Once the package is opened, it is thought that the contract is agreed.

Yokogawa assumes no responsibilities for this software except as stated in the warranty.

This software is used with this product exclusively. This can be viewed and operated through the web browser in the computer which connects with this product.

Cautions for Safely Applying the Device

EMC Conformity Standards

EN61326-1 Class A, Table 2, EN55011 Class A, Group 1, EN61000-6-2

This instrument is a Class A product, and it is designed for use in the industrial environment.

Please use this instrument in the industrial environment only.

Safety Conformity Standards

Applicable standard: CSA C22.2 No.61010-1, EN 61010-1

(1) Pollution Degree 2

"Pollution degree" describes the degree to which a solid, liquid, or gas which deteriorates dielectric strength or surface resistivity is adhering. "2" applies to normal indoor atmosphere. Normally, only non-conductive pollution occurs. Occasionally, however, temporary conductivity caused by condensation must be expected.

(2) Overvoltage category I

"Overvoltage category (Installation category)" describes a number which defines a transient overvoltage condition. It implies the regulation for impulse withstand voltage. "I" applies to electrical equipment which is supplied from the circuit when appropriate transient overvoltage control means (interface) are provided.

(3) Indoor/Outdoor use

It can be used in indoors and outdoors.

(4) Altitude of installation site

Max. 3,000 m above sea level

Wiring the Ground

Appropriate grounding is necessary for the stable operation of YFGW410.

The frame ground (FG) terminal (M4 screw) is located on the side of power supply connector on the top side of the mainbody.

To connect the ground cable to the FG terminal, use a ring tongue terminal for M4 with an insulation sleeve.

Secure the M4 screws at a tightening torque of 1.2 to 1.5 Nm.

SEE ALSO For grounding of YFGW410, see "C4.3 Grounding" of the YFGW410 user's manual (IM01W02D01-01EN).

Control of Pollution Caused by the Product

China RoHS

This is an explanation for the product based on “Control of Pollution caused by Electronic Information Products” in the People’s Republic of China.

電子情報製品汚染制御管理弁法（中国版 RoHS）

产品中有害物质或元素的名称及含量

型号	部件名称	有害物质					
		铅（Pb）	汞（Hg）	镉（Cd）	六价铬（Cr(VI)）	多溴联苯（PBB）	多溴二苯醚（PBDE）
YFGW410 现场无线管理站	壳体	×	○	○	○	○	○
	基板组件	×	○	○	○	○	○
	电缆	×	○	○	○	○	○

○：表示该部件的所有均质材料中的有害物质的含量均在GB/T26572 标准中所规定的限量以下。
×：表示至少该部件的某些均质材料中的有害物质的含量均在GB/T26572 标准中所规定的限量以上。

环保使用期限：



该标识适用于SJ/T11364 中所述，在中华人民共和国销售的电子电气产品的环保使用期限。

注）该年数为“环保使用期限”，并非产品的质量保证期。

EU RoHS

This product is in conformity with the following standard:

EN IEC 63000 (Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances)

Explosion Protected Type Specifications

CAUTION

This instrument has been tested and certified as being explosion protected. Please note that severe restrictions apply to this instrument's construction, installation, external wiring, maintenance and repair. A failure to abide by these restrictions could make the instrument a hazard to operate.

Optional Specifications (For Explosion Protected Types)

Item	Description	Code
Factory Mutual (FM)	Nonincendive Approval *1	-
ATEX	ATEX Type n declaration Applicable Standard: EN IEC 60079-0, EN 60079-15 II 3 G Ex nA IIC T4 Gc X Amb. Temp.(Tamb): -40 to 65°C (altitude: up to 2000 m), -40 to 55°C (altitude: up to 3000 m)	KN27
Canadian Standards Association (CSA)	Nonincendive Approval *1	-
IECEx	Type n Approval *2	-

*1: To be compliant with these standards, the YFGW410 hardware needs to be installed in a lockable metal cabinet.
*2: To be compliant with these standards, the YFGW410 hardware needs to be installed in a lockable metal cabinet of IP54 or higher protection rating.

ATEX

Caution for ATEX Type n declaration

(1) Technical Data

Note 1. Model YFGW410 Field Wireless Management Station with optional code /KN27 is applicable for use in hazardous area.

- Applicable Standards: EN IEC 60079-0, EN 60079-15
- Marking: Ⓔx II 3 G Ex nA IIC T4 Gc X
- Ambient Temperature: -40 to 65°C (altitude : up to 2000 m)
  -40 to 55°C (altitude : up to 3000 m)
- Power Supply: Voltage Range *1 10.8~26.4 V DC
  Rated voltage 24.0 V DC
  *1: The equipment shall not be operated outside the range.
- Power Dissipation: ≤ 10 W
- Altitude: Up to 3000 m
- Enclosure: The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP54 in accordance with EN 60079-15.
- Pollution degree: 2
- Signals: Ethernet and RS485 and RS-232C

(2) Specific Conditions of Use

- The equipment shall only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.
- The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP 54 in accordance with IEC 60079-15.

(3) Installation



WARNING

- The equipment shall be installed and used within their ratings.
- All equipment and wiring in hazardous areas shall be installed in accordance with EN 60079-14 and related local electrical codes and the installation shall also comply with the appropriate requirements for non-hazardous areas.
- Instructions provided in GS (General specifications) ,TI (Technical Information of Installation Guidance) and/or IM (User's Manuals) shall be observed.
- The installation shall be carried out only by qualified personnel whose training has included instruction on the type of protection and installation practices, relevant rules and regulations and general principles of area classification.
- The degree of protection not less than IP54 shall be maintained at cable entries into the cabinet.
- It must be observed during the installation that the venting slots of the equipment are not blocked off by cable parts, fixing accessories etc.

- On completion of the installation and prior to first use, initial inspection of the equipment and installation shall be carried out in accordance with EN 60079-17.
- Screws of terminals for field wiring connections shall be tightened with specified torque values.
- Make sure that all the cables are rigidly fixed in the cabinet so as to ensure the safety and performance.

(4) Operation



WARNING

WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

DO NOT OPEN THE CABINET WHILE THE EQUIPMENT ARE ENERGIZED

DO NOT SEPARATE THE CONNECTIONS WHEN ENERGIZED

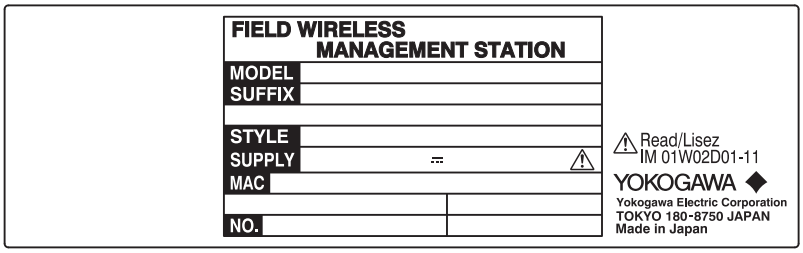
(5) Maintenance and Repair

WARNING

- A modification of the equipment would no longer comply with the construction described in the certificate documentation.
- Only personnel authorized by Yokogawa Electric Corporation can repair the equipment.

(6) Name Plate

- Main Name plate



MODEL: Specified model code.

SUFFIX: Specified suffix code.

STYLE: Style code.

SUPPLY: Specified supply voltage and wattage.

NO.: Serial number and year of production *1.

YOKOGAWA ◆ TOKYO 180-8750 JAPAN:
The manufacturer name and the address *2.

*1: Production year and month are shown as yyyy.mm.
For example, 2013.01 denotes January 2013.

*2: "180-8750" is a postal code which represents the following address.
2-9-32 Nakacho, Musashino-shi, Tokyo Japan

- Hazardous class name plate



How to Use Online Manual

It is necessary to install Adobe Acrobat Reader to read the instruction manual (YFGW410 Field Wireless Management Station: IM 01W02D01-01EN).

Install the following Adobe Reader by the administrator authority.

- Adobe Reader 9.3 or later

TIP

Adobe Reader can be downloaded from the Web site of Adobe Systems Incorporated.

Reading Online Manual

The online manual is stored in the attached DVD-ROM. The file is not installed in the PC even if the attached software is installed to PC. Open the file by Adobe Reader to read the manual.

DVD-ROM Drive:\Document\en\IM 01W02D01-01EN.pdf

Preparation to Use YFGW410 Attached Software

To use YFGW410 Attached Software, a web browser for the following operating systems must have been installed in the PC.

Windows operating system*1	Web browser
Windows 10 Pro (32/64 bit)*2	Internet Explorer 11
Windows 7 Professional Service Pack 1 (32/64 bit)	Internet Explorer 11
Windows Server 2016 (64 bit)	Internet Explorer 11
Windows Server 2008 R2 Enterprise Service Pack 1 (64 bit)	Internet Explorer 11

*1: Microsoft .NET Framework 4.7.2 is required.
*2: Version 1809

For details on how to use web browsers, see the instruction manuals of respective operating systems.

The details of attached DVD-ROM, refer to the Readme_en.txt

DVD-ROM Drive:\Readme_en.txt

Copyright and Trademark Notices

All Rights Reserved

The copyrights of the media and this manual are reserved.

No part of the manual may be transferred, sold, distributed (including delivery via a commercial PC network or the like), or registered or recorded on video tapes or other media.

Trademark Acknowledgments

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- Microsoft, Windows, Windows Server and Microsoft .NET Framework are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Adobe, Acrobat and Acrobat Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.
- Ethernet is a registered trademark of XEROX Corporation.
- All other company and product names mentioned in this User's Manual are trademarks or registered trademarks of their respective companies.
- We do not use TM or ® mark to indicate those trademarks or registered trademarks in this User's Manual.

Patent Notice

Notice

NO RIGHTS OR LICENSES, EXPRESS OR IMPLIED, ARE GRANTED TO USE THIRD-PARTY DEVICES IN COMBINATION WITH THESE PRODUCTS IN A WIRELESS MESH NETWORK, OR TO USE THIRD-PARTY SERVICES TO ACCESS, MONITOR OR CONTROL THESE PRODUCTS IN A WIRELESS MESH NEWORK VIA THE INTERNET OR ANOTHER EXTERNAL WIDE AREA NETWORK.

Patent Marking

Covered by one or more claims of patents: http://sipcollc.com/patent-list/ and http://intusiq.com/patent-list/.

Third Party Software

This product uses third parties software including open source software that is based on GNU general public license (GPL), etc.

Terms and Conditions of GPL

For details of GPL, visit the website:

http://www.gnu.org/copyleft/gpl.html

About Third Party Software License

The text of the third parties software license terms is provided to the License_en.txt in attached DVD-ROM.

DVD-ROM Drive:\Third Party Software\License_en.txt

Operation Guarantee

According to the terms and conditions of the license shown above, we do not guarantee the operation of third parties software itself.

Information on Respective Open Source License Software

For module names and source codes of open source software that is used in this product, please contact us.

About User's Manual

■ Composition of User's Manual

This chapter explains the composition of User's Manual.

The following printed user's manual is attached to YFGW410 hardware.

- IM 01W02D01-11EN: YFGW410 Field Wireless Management Station Read Me First

The following online user's manual is stored in the attached DVD-ROM for YFGW410.

- IM 01W02D01-01EN: YFGW410 Field Wireless Management Station

Information of User's Manual Revision

Material Name: YFGW410 Field Wireless Management Station Read Me First

Material Number: IM 01W02D01-11EN

Edition	Date	Page	Revised Item
1st Edition	August 2012		New Issue
2nd Edition	May 2014		Add ATEX type n declaration
3rd Edition	March 2016	2 5+ 8 10	Add document list Add "Safe Use of This Product" Add "Transportation of products contains lithium batteries" Update issue year of ATEX Applicable Standards
4th Edition	March 2017	2 10 11 14 16	Update "Introduction" Add RoHS description Update ATEX Type n declaration Update name plates Add "Patent Notice"
5th Edition	June 2017	2 15 17	Update "Introduction" Update description about operating system Update description about third party software license
6th Edition	November 2017	12 14	Modifiy description about power supply Update nameplates
7th Edition	July 2020	15 16	Update "Preparation to Use YFGW410 Attached Software" Update "Copyright and Trademark Notices"
8th Edition	July 2021	3 8 9 10 to 13	Delete ATEX documentation. Add notes for low battery alarm. Updated EU RoHS standard. Updated ATEX standard.

YFGW410 Software License Agreement

IMPORTANT - PLEASE READ CAREFULLY BEFORE INSTALLING OR USING:
THIS AGREEMENT IS A LEGAL AGREEMENT BETWEEN YOU AND YOKOGAWA ELECTRIC CORPORATION AND/OR ITS SUBSIDIARIES (COLLECTIVELY, "YOKOGAWA") FOR YOU TO INSTALL OR USE YOKOGAWA YFGW410 SOFTWARE PRODUCT. BY VIEWING OR OTHERWISE USING THE SOFTWARE PRODUCT THROUGH A STANDARD WEB BROWSER OF CERTAIN OPERATING SYSTEMS, YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THIS AGREEMENT. IF YOU DO NOT AGREE, DO NOT USE THE SOFTWARE PRODUCT AND PROMPTLY CONTACT YOUR LOCAL DISTRIBUTOR. IF YOU ARE NOT THE END USER OF THE SOFTWARE PRODUCT, YOU ARE REQUIRED TO PRESENT THE TERMS AND CONDITIONS OF THIS AGREEMENT TO THE END USER AND OBTAIN ITS CONSENT TO ABIDE BY THEM BEFORE IT STARTS TO USE THE SOFTWARE PRODUCT. SHOULD THERE BE ANY DISCREPANCY BETWEEN THIS AGREEMENT AND ANY OTHER WRITTEN AGREEMENT MADE BETWEEN YOU AND YOKOGAWA, THE LATTER SHALL PREVAIL.

1. Scope

1.1 This Agreement applies to the YFGW410 software products (the "Software Product"). The Software Product consists of:
- a) Standard Software Product: The software products listed in the catalogues or "General Specifications" of Yokogawa.
- b) Customized Software Product: The software products made by Yokogawa based on individually agreed specifications, which will be used with or in addition to the function of the Standard Software Product.

1.2 The Software Product includes, without limitation, computer programs, manuals and other associated documents, databases, fonts, input data, and any images, photographs, animations, video, voice, music, text, and applets (software linked to text and icons) embedded in the software.

1.3 Unless otherwise provided by Yokogawa, this Agreement applies to the updates and upgrades of the Software Product.

2. Grant of License

2.1 Subject to the terms and conditions of this Agreement, Yokogawa hereby grants to you a non-exclusive and non-transferable right to use the Software Product on the computer specified by Yokogawa or if not specified, on a single computer and solely for your internal operation use, in consideration of full payment by you to Yokogawa of the license fee separately agreed upon.

2.2 Unless otherwise agreed or provided by Yokogawa in writing, the following acts are prohibited:
- a) to reproduce the Software Product;
- b) to sell, lease, distribute, transfer, pledge, sublicense, make available via the network or otherwise convey the Software Product or the license granted herein to any other person or entity;
- c) to use the Software Product on any unauthorized computer via the network;
- d) to cause, permit or attempt to dump, disassemble, decompile, reverse-engineer, or otherwise translate or reproduce the Software Product into source code or other human readable format, or to revise or translate the Software Product into other language and change it to other formats than that in which Yokogawa provided;
- e) to cause, permit or attempt to remove any copy protection used or provided in the Software Product; or
- f) to remove any copyright notice, trademark notice, logo or other proprietary notices or identification shown in the Software Product.

2.3 Any and all technology, algorithms, know-how and process contained in the Software Product are the property or trade secret of Yokogawa or licensors to Yokogawa. Ownership of and all the rights in the Software Product shall be retained by Yokogawa or the licensors and none of the rights will be transferred to you hereunder.

2.4 You agree to maintain the aforementioned Yokogawa and the licensors property and trade secret in strict confidence, not to disclose it to any party other than your employees, officers, directors or similar staff who have a legitimate need to know to use the Software Product and agreed in writing to abide by the obligations hereunder.

2.5 Upon expiration or termination of this Agreement, the Software Product and its copies shall be returned to Yokogawa and any copies retained in your computer or media shall be deleted irretrievably. If you dispose of media in which the Software Product or its copy is stored, the contents shall be irretrievably deleted.

2.6 The Software Product may contain software which Yokogawa is granted a right to sublicense by third party suppliers ("Third Party Software"). If suppliers of the Third Party Software ("Supplier") provide special terms and conditions for the Third Party Software which differ from this Agreement, you agree to abide by such terms and conditions separately provided by Yokogawa.

3. Restrictions on Application

3.1 Unless otherwise agreed in writing between you and Yokogawa, the Software Product is not intended, designed, produced or licensed for aircraft operation or control, ship navigation or marine equipment control, or ground facility or device for support of the aforesaid operation or control, nor for planning, construction, maintenance or operation of any nuclear related facility.

3.2 If the Software Product is used for the abovementioned purposes, neither Yokogawa nor Supplier assumes liability for any claim or damage arising from the said use and you shall indemnify and hold Yokogawa, Supplier, their affiliates, subcontractors, officers, directors, employees and agents harmless from any liability or damage whatsoever, including any court costs and attorney's fees, arising out of or related to the said use.

4. Warranty

4.1 Yokogawa warrants that, for one year from the delivery by Yokogawa or any other period to be agreed by Yokogawa in writing ("Warranty Period"), the Software Product shall, if it is properly used under the operational conditions and on the hardware designated by Yokogawa and if used in accordance with the environmental or other conditions defined by Yokogawa or hardware supplier, operate substantially in compliance with the manuals or functional specifications provided by Yokogawa. The Warranty Period commences from the delivery of the Software Product by Yokogawa or when any part of the Software Product is used for operation, whichever comes earlier.

4.2 Under no conditions will Yokogawa warrant that:

a) the Software Product is uninterrupted;
b) the Software Product is error free;
c) the Software Product is completely corrected;
d) the Software Product has no inconsistency or interference with other software;
e) the Software Product fits for a particular purpose or your intention; or
f) the Software Product or the results arising there from is precise, reliable or up-to-date.

4.3 In case, during the Warranty Period, it is found that the Software Product does not operate in compliance with the manuals or functional specifications of Yokogawa, or its medium has a physical defect, Yokogawa will, at Yokogawa's discretion, repair, replace or present a workaround without charge, unless otherwise agreed by Yokogawa. However, if Yokogawa engineer or other engineer is required to attend for repair, replacement or implementing a workaround at the site, you will be charged for the site service fee. If Yokogawa deems necessary, you are required to initialize or stop the operation of the system, facility or equipment in or on which the Software Product is installed.

4.4 The above warranties shall not be applied to and Yokogawa shall not be liable for the defect or noncompliance which is subject to any of the following circumstances:

a) the hardware on which the Software Product is installed has ceased to be covered by the warranty or maintenance contract of the hardware supplier;
b) if the hardware on which the Software Product needs to be installed is specified, the hardware has been changed to other hardware without consent of Yokogawa;
c) modification, improvement or alteration is made by a person other than Yokogawa or its designated service provider;
d) your or third party's (excluding the service provider designated by Yokogawa) misuse, alteration, addition of new function, or use for any purpose not provided in the functional specifications of Yokogawa;
e) the appropriate environmental or other conditions provided by Yokogawa or hardware supplier is not complied with;
f) the corrective action (including repair, replacement or workaround) for the defect or non-compliance is not implemented as suggested by Yokogawa; or
g) any other causes which are not deemed attributable to Yokogawa.

4.5 Notwithstanding the foregoing, any warranty with respect to the Third Party Software is subject to the terms and conditions of the Supplier.

4.6 THE ABOVE WARRANTY IS GIVEN AND ACCEPTED AS A SOLE AND EXCLUSIVE LIABILITY AND IN LIEU OF ALL OTHER LIABILITY OR WARRANTIES OF ANY KIND WHATSOEVER ON THE PART OF YOKOGAWA OR SUPPLIER, EXPRESS OR IMPLIED, IN FACT OR IN LAW. ALL IMPLIED WARRANTIES AND ESPECIALLY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON-INFRINGEMENT ARE EXPRESSLY EXCLUDED AND DISCLAIMED. The warranty provisions of the applicable law are expressly excluded to the extent permitted.

5. Maintenance Services

5.1 Scope and terms and conditions of maintenance service for the Software Product shall be subject to the latest Yokogawa standard terms and conditions of service or otherwise defined by Yokogawa. Unless otherwise provided in Yokogawa catalogues or General Specifications, services for the Standard Software Product will be available only for the latest version and the immediately preceding version. In any event service for the immediately preceding version will be available only for 5 years after the latest version has been released. In addition, no service will be provided by Yokogawa for the Software Product which has been discontinued for more than 5 years. As for the Customized Software Product, basically, Yokogawa will not provide maintenance service after the Warranty Period, provided that Yokogawa may provide alteration work subject to individual written agreement.

5.2 Notwithstanding otherwise stated in the preceding sub-clause, any maintenance service for the Third Party Software shall be subject to the terms and conditions provided by the Supplier.

6. Infringement

6.1 If you are warned or receive a claim by a third party that the Software Product in its original form infringes any third party's patent (which is issued at the time of delivery of the Software Product), trade mark, copyright or other intellectual property rights ("Claim"), you shall promptly notify Yokogawa thereof in writing.

6.2 If the infringement is attributable to Yokogawa, Yokogawa will defend you from the Claim at Yokogawa's expense and indemnify you from the damages finally granted by the court or otherwise agreed by Yokogawa out of court. The foregoing obligation and indemnity of Yokogawa shall be subject to that i) you promptly notify Yokogawa of the Claim in writing as provided above, ii) you grant to Yokogawa and its designees the full authority to control the defense and settlement of such Claim and iii) you give every and all necessary information and assistance to Yokogawa upon Yokogawa's request.

6.3 If Yokogawa believes that a Claim may be made or threatened, Yokogawa may, at its option and its expense, either a) procure for you the right to continue using the Software Product, b) replace the Software Product with other software product to prevent infringement, c) modify the Software Product, in whole or in part, so that it become non-infringing, or d) if Yokogawa believes that a) through c) are not practicable, refund you the paid-up amount of the book value of the Software Product as depreciated.

6.4 Notwithstanding the foregoing, Yokogawa shall have no obligation nor liability for, and you shall defend and indemnify Yokogawa and its suppliers from, the Claim, if the infringement is arising from a) modification of the Software Product made by a person other than Yokogawa, b) combination of the Software Product with hardware or software not furnished by Yokogawa, c) design or instruction provided by or on behalf of you, d) not complying with Yokogawa's suggestion, or e) any other causes not attributable to Yokogawa.

7. Limitation of Liability

EXCEPT TO THE EXTENT THAT LIABILITY MAY NOT LAWFULLY BE EXCLUDED IN CONTRACT, YOKOGAWA AND SUPPLIERS SHALL NOT BE LIABLE TO ANY PERSON OR LEGAL ENTITY FOR LOSS OR DAMAGE, WHETHER DIRECT, INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES, OR OTHER SIMILAR DAMAGES OF ANY KIND, INCLUDING WITHOUT LIMITATION, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OR DESTRUCTION OF DATA, LOSS OF AVAILABILITY AND THE LIKE, ARISING OUT OF THE USE OR INABILITY TO USE OF THE SOFTWARE PRODUCT, OR ARISING OUT OF ITS GENERATED APPLICATIONS OR DATA, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER BASED IN WARRANTY (EXPRESS OR IMPLIED), CONTRACT, STRICT LIABILITY, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER LEGAL OR EQUITABLE GROUNDS. IN NO EVENT YOKOGAWA AND SUPPLIER'S AGGREGATE LIABILITY FOR ANY CAUSE OF

ACTION WHATSOEVER (INCLUDING LIABILITY UNDER CLAUSE 6) SHALL EXCEED THE DEPRECIATED VALUE OF THE LICENSE FEE PAID TO YOKOGAWA FOR THE USE OF THE CONCERNED PART OF THE SOFTWARE PRODUCT.
If the Software Product delivered by Yokogawa is altered, modified or combined with other software or is otherwise made different from Yokogawa catalogues, General Specifications, basic specifications, functional specifications or manuals without Yokogawa's prior written consent, Yokogawa shall be exempted from its obligations and liabilities under this Agreement or law.

8. Assignment

You shall not assign its rights or obligations under this Agreement without prior written consent of Yokogawa. If you novate or assign this Agreement and the Software Product with Yokogawa's consent, you shall transfer all copies and whole part of the Software Product to the assignee and shall delete any copy of the Software Product in possession. This Agreement shall inure to the benefit of and shall be binding on the successors of the parties.

9. Export Control

You agree to comply with the export control and related laws, regulations and orders of Japan, the United States of America, and any other applicable countries and, if you export or reexport the Software Product, to obtain export/import permit and take all necessary procedures under your own responsibility and at your own expense.

10. Audit; Withholding

10.1 Yokogawa shall have the right to access and audit your facilities and any of your records, including data stored on computers, in relation to the use of the Software Product as may be reasonably necessary in Yokogawa's opinion to verify that the requirements of this Agreement are being met.

10.2 Even after license being granted under this Agreement, should there be any change in circumstances or environment of use which was not foreseen at the time of delivery and, in Yokogawa's reasonable opinion, is not appropriate for using the Software Product, or if Yokogawa otherwise reasonably believes it is too inappropriate for you to continue using the Software Product, Yokogawa may suspend or withhold the license provided hereunder.

11. Termination

Yokogawa shall have the right to terminate this Agreement with immediate effect upon notice to you, if you or end users breach any of the terms and conditions hereof. Upon termination of this Agreement, you shall, and make end users, promptly cease using the Software Product and, in accordance with sub-clause 2.5, return or irretrievably delete all copies of the Software Product, certifying the same in writing. In this case the license fee paid by you for the Software Product shall not be refunded. Clauses 2.4 and 2.5, 6, 7 and 12 shall survive any termination of this Agreement.

12. Governing Law; Disputes

This Agreement shall be governed by and construed in accordance with the laws of Japan. If you are a Japanese individual or entity, all disputes, controversies or differences which may arise between the parties hereto, out of, in relation to or in connection with this Agreement ("Dispute") shall be brought exclusively in the Tokyo District Court (The Main Court) in Japan. If you are not a Japanese individual or entity, any Dispute shall be finally settled by arbitration in Tokyo, Japan in accordance with the Commercial Arbitration Rules of the Japan Commercial Arbitration Association. All proceedings in arbitration shall be conducted in the English language, unless otherwise agreed. The award of arbitration shall be final and binding upon both parties, however, each party may make an application to any court having jurisdiction for judgment to be entered on the award and/or for enforcement of the award.

13. Miscellaneous

13.1 This Agreement supersedes all prior oral and written understandings, representations and discussions between the parties concerning the subject matter hereof to the extent such understandings, representations and discussions should be discrepant or inconsistent with this Agreement.

13.2 If any part of this Agreement is found void or unenforceable, it shall not affect the validity of the balance of the Agreement, which shall remain valid and enforceable according to its terms and conditions. The parties hereby agree to attempt to substitute for such invalid or unenforceable provision a valid or enforceable provision that achieves to the greatest extent possible the economic, legal and commercial objectives of the invalid or unenforceable provision.

13.3 Failure by either party to insist on performance of this Agreement or to exercise a right when entitled does not prevent such party from doing so at a later time, either in relation to that default or any subsequent one.