User's Manual

YFGW520 Field Wireless Access Point

Read Me First

IM 01W02E02-11EN

This document specifies the important information to use this product correctly and safely and the License Agreement of Attached Software for YFGW520 Field Wireless Access Point.

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

The configuration of the field wireless system is described in User's Manual of the YFGW410 Field Wireless Management Station (IM 01W02D01-01EN). Read that document first.

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YOKOGAWA
Yokogawa Electric Corporation

IM 01W02E02-11EN
1st Edition

Introduction

This manual (IM 01W02E02-11EN) describes the safety precautions, explosion protected type specifications and the license agreement of attached software for the YFGW520.

There are three documents including this one for the YFGW520 listed below. Read them along with this manual.

Document No.	Document name	Description
IM 01W02E02-01EN	YFGW520 Field Wireless Access Point	This manual is stored in the attached DVD-ROM for YFGW520. It describes installation, wiring, operation, maintenance and specification of the YFGW520.
IM 01W02E02-11EN	YFGW520 Field Wireless Access Point Read Me First	This manual. It describes the safety precaution, explosion protected type specifications and the license agreement of the attached software for the YFGW520.
GS 01W02E02-01EN	YFGW520 Field Wireless Access Point	Product specification including detailed model and suffix code, optional specifications and accessory of the YFGW520.

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.**

ATEX Documentation

This is only applicable to the countries in European Union.

GB
All instruction manuals for ATEX Ex related products are available in English, German and French. Should you require Ex related instructions in your local language, you are to contact your nearest Yokogawa office or representative.

DK
Alle brugervejledninger for produkter relateret til ATEX Ex er tilgængelige på engelsk, tysk og fransk. Skulle De ønske yderligere oplysninger om håndtering af Ex produkter på eget sprog, kan De rette henvendelse herom til den nærmeste Yokogawa afdeling eller forhandler.

I
Tutti i manuali operativi di prodotti ATEX contrassegnati con Ex sono disponibili in inglese, tedesco e francese. Se si desidera ricevere i manuali operativi di prodotti Ex in lingua locale, mettersi in contatto con l'ufficio Yokogawa più vicino o con un rappresentante.

E
Todos los manuales de instrucciones para los productos antiexplosivos de ATEX están disponibles en inglés, alemán y francés. Si desea solicitar las instrucciones de estos artículos antiexplosivos en su idioma local, deberá ponerse en contacto con la oficina o el representante de Yokogawa más cercano.

NL
Alle handleidingen voor producten die te maken hebben met ATEX explosiebeveiliging (Ex) zijn verkrijgbaar in het Engels, Duits en Frans. Neem, indien u aanwijzingen op het gebied van explosiebeveiliging nodig hebt in uw eigen taal, contact op met de dichtstbijzijnde vestiging van Yokogawa of met een vertegenwoordiger.

SF
Kaikkien ATEX Ex -tyyppisten tuotteiden käyttöhjeet ovat saatavilla englannin-, saksan- ja ranskankielisinä. Mikäli tarvitsette Ex -tyyppisten tuotteiden ohjeita omalla paikallisella kielellännne, ottakaa yhteyttä lähimpään Yokogawa-toimistoon tai -edustajaan.

P
Todos os manuais de instruções referentes aos produtos Ex da ATEX estão disponíveis em Inglês, Alemão e Francês. Se necessitar de instruções na sua língua relacionadas com produtos Ex, deverá entrar em contacto com a delegação mais próxima ou com um representante da Yokogawa.

F
Tous les manuels d'instruction des produits ATEX Ex sont disponibles en langue anglaise, allemande et française. Si vous nécessitez des instructions relatives aux produits Ex dans votre langue, veuillez bien contacter votre représentant Yokogawa le plus proche.

D
Alle Betriebsanleitungen für ATEX Ex bezogene Produkte stehen in den Sprachen Englisch, Deutsch und Französisch zur Verfügung. Sollten Sie die Betriebsanleitungen für Ex-Produkte in Ihrer Landessprache benötigen, setzen Sie sich bitte mit Ihrem örtlichen Yokogawa-Vertreter in Verbindung.

S
Alla instruktionsböcker för ATEX Ex (explosionssäkra) produkter är tillgängliga på engelska, tyska och franska. Om Ni behöver instruktioner för dessa explosionssäkra produkter på annat språk, skall Ni kontakta närmaste Yokogawakontor eller representant.

GR
Όλα τα εγχειρίδια λειτουργίας των προϊόντων με ATEX Ex διατίθενται στα Αγγλικά, Γερμανικά και Γαλλικά. Σε περίπτωση που χρειάζεστε οδηγίες σχετικά με Ex στην τοπική γλώσσα παρακαλούμε επικοινωνήστε με το πλησιέστερο γραφείο της Yokogawa ή αντιπρόσωπο της.

SK
Všetky návody na obsluhu pre prístroje s ATEX Ex sú k dispozícii v jazyku anglickom, nemeckom a francúzskom. V prípade potreby návodu pre Ex-prístroje vo Vašom národnom jazyku, skontaktujte prosím miestnu kanceláriu firmy Yokogawa.

CZ
Všechny uživatelské příručky pro výrobky, na něž se vztahuje nevýbušné schválení ATEX Ex, jsou dostupné v angličtině, němčině a francouzštině. Požadujete-li pokyny týkající se výrobků s nevýbušným schválením ve vašem lokálním jazyku, kontaktujte prosím vaši nejbližší reprezentační kancelář Yokogawa.

LT
Visos gaminiø ATEX Ex kategorijos Eksploatavimo instrukcijos teikiami anglø, vokieèiø ir prancûzø kalbomis. Norëdami gauti prietaisø Ex dokumentacijà kitomis kalbomis susisiekite su artimiausiu bendrovës "Yokogawa" biuru arba atstovu.

LV
Visas ATEX Ex kategorijas izstrâdâjumu Lietoðanas instrukcijas tiek piegâdâtas angïu, vâcu un franèu valodâs. Ja vçlaties saòemt Ex ierîèu dokumentâciju citâ valodâ, Jums ir jâsazinâs ar firmas Jokogava (Yokogawa) tuvâko ofisu vai pârstâvi.

EST
Kõik ATEX Ex toodete kasutamisjuhendid on esitatud inglise, saksa ja prantsuse keeles. Ex seadmete muukeelse dokumentatsiooni saamiseks pöörduge lähima lokagava (Yokogawa) kontori või esindaja poole.

PL
Wszystkie instrukcje obsługi dla urządzeń w wykonaniu przeciwwybuchowym Ex, zgodnych z wymaganiami ATEX, dostępne są w języku angielskim, niemieckim i francuskim. Jeżeli wymagana jest instrukcja. obsługi w Państwa lokalnym ję zyku, prosimy o kontakt z najbliższym biurem Yokogawy.

SLO
Vsi predpisi in navodila za ATEX Ex sorodni pridelki so pri roki v angliščini, nemščini ter francoščini. Èe so Ex sorodna navodila potrebna v vašem tukejnjem jeziku, kontaktirajte vaš najbliši Yokogawa office ili predstaunika.

H
Az ATEX Ex mûszerek gépkönyveit angol, német és francia nyelven adjuk ki. Amennyiben helyi nyelven kérik az Ex eszközök leírásait, kérjük keressék fel a legközelebbi Yokogawa irodát, vagy képviseletet.

BG
Всички упътвания за продукти от серията ATEX Ex се предлагат на английски, немски и френски език. Ако се нуждаете от упътвания за продукти от серията Ex на родния ви език, се свържете с най-близкия офис или представителство на фирма Yokogawa.

RO
Toate manualele de instructiuni pentru produsele ATEX Ex sunt in limba engleza, germana si franceza. In cazul in care doriti instructiunile in limba locala, trebuie sa contactati cel mai apropiat birou sau reprezentant Yokogawa.

M
Il-manwali kollha ta' l-istruzzjonijiet għal prodotti marbuta ma' ATEX Ex huma disponibbli bl-Ingliż, bil-Ġermaniż u bil-Franċiż. Jekk tkun teħtieġ struzzjonijiet marbuta ma' Ex fil-lingwa lokali tiegħek, għandek tikkuntattja lill-eqreb rappreżentan jew uffiċċju ta' Yokogawa.

F01.ai

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 the instrument and the system, please be sure to follow this manual's safety instructions when handling this instrument. If these instructions are not heeded, the protection provided by this instrument may be impaired. In this case, Yokogawa cannot guarantee that the instrument 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.

(c) Operation

- Wait 1 min. after the power is turned off, before opening the covers.

(d) Maintenance

- Please carry out only the maintenance procedures described in this manual. If you require further assistance, please contact the nearest Yokogawa office.
- Care should be taken to prevent the build up of dust or other materials on the display glass and the name plate. To clean these surfaces, use a soft, dry cloth.

(e) Explosion Protected Type Instrument

- Users of explosion protected instruments should refer first to "Explosion Protected Type Specifications" 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 modificationmade to this instrument by the customer.

(g) Product Disposal

- The instrument should be disposed of in accordance with local and national legislation/ regulations.

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.**

Authorized Representative in the EEA

The Authorized Representative for this product in the EEA is: Yokogawa Europe B.V.

Euroweg 2, 3825 HD Amersfoort, THE NETHERLANDS.

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 01W02E02-01EN" is in compliance with the specifications written on the order sheet. If you have any questions, contact our sales office or your local distributor.

Notes on Attached Software

- **Before opening the media package, read YFGW520 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 installed in the computer which connects with this product.**

Regulatory Compliance for Radio and Telecommunication

Please confirm that an installation region fulfills a standards, require additional regulatory information and approvals, contact to Yokogawa Electric Corporation.

Radio Equipment Directive

Hereby, Yokogawa Electric Corporation declares that the radio equipment type YFGW520 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:

http://www.yokogawa.com/fld/

EMC Conformity Standards

EN 301 489-1, EN 301 489-17, EN 61326-1 Class A, Table 2 (For use in industrial locations), 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: EN61010-1, EN62479

(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) Installation 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.

Spectrum Conformity Standard

EN 300 328

FCC compliance

FCC Approval (Part 15C)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Co-located:

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

RF Exposure Compliance:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

ISED compliance

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

This device complies with ISED's applicable licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'ISDE applicables aux appareils radio exempts de licence.L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This radio transmitter IC Number 8999A-WIC014 has been approved by ISED to operate with the antenna types listed below with the maximum permissible gain and required antenna impedance for each antenna type indicated. Antenna types not included in this list, having a gain greater than the maximum gain indicated for that type, are strictly prohibited for use with this device.

Antenna type	Frequency Band	Gain, Impedance	Description
Sleeve	2.4 GHz	2.14dBi, 50 Ω	
Collinear	2.4 GHz	9dBi, 50 Ω	
Hybrid patch	2.4 GHz	15dBi, 50 Ω	

Le présent émetteur radio IC Number 8999A-WIC014 a été approuvé par Industrie Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal et l'impédance requise pour chaque type d'antenne. Les types d'antenne non inclus dans cette liste, ou dont le gain est supérieur au gain maximal indiqué, sont strictement interdits pour l'exploitation de l'émetteur.

Antenna type	Frequency Band	Gain, Impedance	Description
Sleeve	2.4 GHz	2.14dBi, 50 Ω	
Collinear	2.4 GHz	9dBi, 50 Ω	
Hybrid patch	2.4 GHz	15dBi, 50 Ω	

This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 20cm or more away from person's body.

Cet equipement est conforme aux limites d'exposition aux rayonnements enoncees pour un environnement non controle et respecte les regles d'exposition aux frequences radioelectriques (RF) CNR-102 de l'IC. Cet equipement doit etre installe et utilise en gardant une distance de 20 cm ou plus entre le radiateur et le corps humain.

Control of Pollution Caused by the Product

EU RoHS

This product is in conformity with the following standard:

EN 50581:2012 (Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances)