

User's Manual

720940 GPS Unit

This manual describes the safety precautions for using the GPS unit and the GPS unit specifications. For details on its handling procedure, see the user's manual of the measuring instrument that the GPS unit will be used with.

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IM 720940-01EN
1st Edition

Conventions Used in This Manual

The notes and cautions in this manual are categorized using the following symbols.



Improper handling or use can lead to injury to the user or damage to the instrument. This symbol appears on the instrument to indicate that the user must refer to the user's manual for special instructions. The same symbol appears in the corresponding place in the user's manual to identify those instructions. In the manual, the symbol is used in conjunction with the word "WARNING" or "CAUTION."

WARNING

Calls attention to actions or conditions that could cause serious or fatal injury to the user, and precautions that can be taken to prevent such occurrences.

CAUTION

Calls attention to actions or conditions that could cause light injury to the user or damage to the instrument or user's data, and precautions that can be taken to prevent such occurrences.

French



Une manipulation ou une utilisation incorrectes risquent de blesser l'utilisateur ou d'endommager l'instrument. Ce symbole apparaît sur l'instrument pour indiquer à l'utilisateur qu'il doit se reporter au manuel de l'utilisateur afin d'y lire les instructions spécifiques correspondantes. Ce même symbole apparaît à la section correspondante du manuel de l'utilisateur pour signaler lesdites instructions. Dans le manuel de l'utilisateur, ce symbole est accompagné des termes AVERTISSEMENT et ATTENTION.

AVERTISSEMENT

Attire l'attention sur des gestes ou des conditions susceptibles de provoquer des blessures graves (voire mortelles), et sur les précautions de sécurité pouvant prévenir de tels accidents.

ATTENTION

Attire l'attention sur des gestes ou des conditions susceptibles de provoquer des blessures légères ou d'endommager l'instrument ou les données de l'utilisateur, et sur les précautions de sécurité susceptibles de prévenir de tels accidents.

Note

Calls attention to information that is important for the proper operation of the instrument.

Safety Precautions

This product is designed to be used by a person with specialized knowledge. The general safety precautions described herein must be observed during all phases of operation. If the instrument is used in a manner not specified in this manual, the protection provided by the instrument may be impaired. This manual is part of the product and contains important information. Store this manual in a safe place close to the instrument so that you can refer to it immediately. Keep this manual until you dispose of the instrument. YOKOGAWA assumes no liability for the customer's failure to comply with these requirements. The following symbols are used on this instrument.



Warning: handle with care. Refer to the user's manual or service manual. This symbol appears on dangerous locations on the instrument which require special instructions for proper handling or use. The same symbol appears in the corresponding place in the manual to identify those instructions.

French



Avertissement : À manipuler délicatement. Toujours se reporter aux manuels d'utilisation et d'entretien. Ce symbole a été apposé aux endroits dangereux de l'instrument pour lesquels des consignes spéciales d'utilisation ou de manipulation ont été émises. Le même symbole apparaît à l'endroit correspondant du manuel pour identifier les consignes qui s'y rapportent.

Safety Precautions



WARNING

Observe the following precautions to prevent fire or electric shock.

Usage

- The GPS unit is designed exclusively for YOKOGAWA products. Do not use the GPS unit for devices other than the specified YOKOGAWA products.
- Do not disassemble or modify the GPS unit.
- Do not drop or throw the GPS unit.
- Do not leave the GPS unit in a hot location, such as near fire or under the blazing sun.



CAUTION

- Do not use the GPS unit outdoors.
- Do not allow the GPS unit to hang in the air during use.

Operating Environment Limitations

This product is a Class A (for industrial environment) product. Operation of this product in a residential area may cause radio interference in which case the user will be required to correct the interference.

French



AVERTISSEMENT

Respecter les précautions suivantes pour éviter de provoquer un incendie ou de vous électrocuter.

Utilisation

- L'unité GPS est exclusivement conçu pour les produits YOKOGAWA. Ne pas utiliser l'unité GPS pour d'autres appareils que les produits YOKOGAWA indiqués.
- Ne pas démonter ou modifier l'unité GPS.
- Ne pas laisser tomber ou jeter l'unité GPS.
- Ne pas laisser l'unité GPS dans un endroit chaud, par exemple à proximité d'un feu ou en plein soleil.



ATTENTION

- Ne pas utiliser l'unité GPS à l'extérieur.
- Ne pas laisser l'unité GPS pendre dans le vide en cours d'utilisation.

The GPS unit comes with the following manuals. Please keep them in a safe place.

Manual Title	Manual No.	Description
GPS Unit User's Manual	IM 720940-01EN	This manual.
Model 720940 Radio Equipment Directive(RED)	IM 720940-04Z2	Manual for Radio Equipment Directive(RED)
Inquiries	PIM113-01Z2	Contact information of Yokogawa offices worldwide is provided.

* The "-EN" in the manual number is the language code.

Models

Model	Suffix	Specifications
720940		GPS Unit

Standard Accessories

Magnet plate for mounting	1
Double-sided tape for magnet plate	1

Manuals

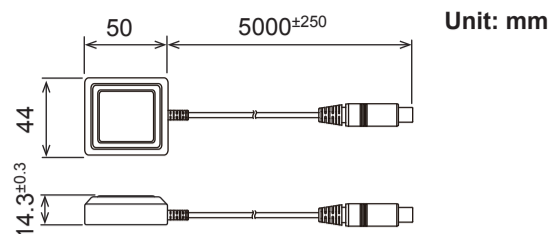
IM 720940-01EN	User's manual (this manual).
IM 720940-04Z2	Manual for Radio Equipment Directive(RED)
PIM113-01Z2	Contact information of Yokogawa offices worldwide is provided.

Specifications

Item	Specification
Receiver Type	GPS(USA)/GLONASS(Russia)/QZSS(Japan) SBAS(MSAS(Japan)/WAAS(USA)/EGNOS(Europe)/GAGAN(India)
Frequency Band	1575.42 MHz 1598.0625 MHz to 1605.375 MHz
Feature ¹	Acquisition of GPS information (latitude, longitude, altitude, velocity, moving azimuth, and others) Time synchronization with the measurement instrument that can be connected to the 720940
Acquisition Sensitivity	-146 dBm Typical (when measurement is stabilized)
Tracking Sensitivity	-165 dBm Typical (when measurement is stabilized)
Data update rate	1 Hz
Datum	WGS-84
Accuracy ²	Horizontal position: 15 m or less (when measurement is stabilized, SA=OFF/PDOP≤3) Velocity: 1 m/s(when measurement is stabilized, SA=OFF/PDOP≤3)
Dynamic Condition	Altitude: -500 m to 18000 m Velocity: 1800 km/h or less Acceleration: 2G or less
Measurement resolution	Latitude, longitude: 1x10 ⁻⁶ Altitude: 0.1 m, 1 m Velocity: 0.01 km/h, 0.1 km/h Azimuth: 0.01°
Standard operating conditions	Ambient Temperature: 23°C±5°C Ambient humidity: 20 to 80%RH
Positioning start time	40 sec Typical(normal temperature)
Operating environment ³	-30°C to 80°C, 95%RH or less(no condensation)
Storage environment	-40°C to 85°C, 95%RH or less(no condensation)
Vibration (inactive state)	44.1 m/s ² , 10 to 200 Hz
Power	3.3 V - 6.0 VDC
Supply Current	65 mA Typical (5.0 VDC)
External dimensions	Approx. 50 mm (W) x 14.3 mm (H) x 44 mm (D) (excluding protrusions)
Weight	Approx. 130 g
Output cable length	Approx. 5 m
Output terminal	mini DIN 9pin male
Safety standards ⁴	Compliant standards: EN 60950-1
EMC ⁴	Compliant standards: EN 301 489-1, EN 301 489-3, EN 301 489-19 EMC Regulatory Arrangement in Australia and New Zealand EN 55011 Class A Group 1 Korea Electromagnetic Conformity Standard (한국 전자파적합성기준) EN 61000-6-2 Class A This product is a Class A (for industrial environment) product. Operation of this product in a residential area may cause radio interference in which case the user will be required to correct the interference.
European Radio Equipment Directive (Spectrum) ⁴	Compliant standards: EN 303 413
Environmental standard ⁴	EN 50581 Monitoring and control instruments including industrial monitoring and control instruments

- 1 The operable time limit of this machine is 0 am April 17, 2033 (UTC time).
- 2 Depending on the measurement location, measurement environment, measurement time, this specification value may not be obtained.
- 3 If the operating environment range of the connected device is narrower than that of this instrument, use within the operating environment range of the connected device.
- 4 Applies to products with CE marks.

External Dimensions



Unless otherwise specified, tolerances are $\pm 3\%$
(however, tolerances are ± 0.3 mm when below 10 mm).

Connecting

For details on connecting the GPS unit to the specified instrument, see the instruction manual of the connecting instrument.

Waste Electrical and Electronic Equipment



Waste Electrical and Electronic Equipment (WEEE)
(This directive is valid only in the EU.)

This product complies with the WEEE Directive marking requirement. This marking indicates that you must not discard this electrical/electronic product in domestic household waste.

Product Category

With reference to the equipment types in the WEEE directive, this product is classified as a "Monitoring and control instruments including industrial monitoring and control instrument" product.

Do not dispose in domestic household waste. When disposing of products in the EU, contact your local Yokogawa Europe B. V. office.

Authorized Representative in the EEA

Yokogawa Europe B. V. is Authorized Representative of Yokogawa Test & Measurement Corporation in the EEA for this Product. To contact Yokogawa Europe B. V., see the separate list of worldwide contacts, PIM 113-0122.

Compliance with the Radio Waves Act (Republic of Korea)

This product complies with the Radio Waves Act (Republic of Korea).

Registration No: MSIP-REM-IMY-WEN027
Equipment Name: GPS Unit
Trade Name: Yokogawa Test & Measurement Corporation
Manufacturer: Yokogawa Test & Measurement Corporation
Country of Origin: Korea

Disposing of the Instrument

When disposing of this instrument, follow the laws and ordinances of the country or region where the product will be disposed of.

环保使用期限

This section is valid in China only.



表示该有毒有害物质在该产品中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。