

General Specifications

YFGW610
Field Wireless Media Converter



GS 01W02D02-01EN

■ GENERAL

This General Specification describes the hardware specification for Field Wireless Media Converter.

Combining this with Field Wireless Management Station (YFGW410) and Field Wireless Access Point (YFGW510) composes the field wireless system.

For outline of a field wireless system, and details of each product, see related products General Specifications.



■ FEATURES

●Special Design for Field Wireless System

Supporting low latency, high quality broadband network traffic, the media converter can also be configured to provide high precision time synchronization for the network as specified in the ISA100.11a standard.

●High tolerance to harsh environment

Wide range of operating temperature along with surge protection ensures safety and high reliability of Field Wireless System.

●Reduction of Installation Cost

Installation can be simplified by plug-and-replay functionality, which is unnecessary to configure itself.

■ HARDWARE SPECIFICATIONS

■ COMMUNICATION INTERFACE

ITEM		Field Wireless Backbone Specifications	Optical Network Specifications
Communication Interface	Standard	100BASE-TX ^{*1}	100BASE-FX ^{*2}
	Transmission Speed	100Mbps	100Mbps
	Connector	RJ-45	SC connector [1pole x 2]
	Cable Type	Category 5	Multi-Mode Fiber 50/125 or 62.5/125μm (2 cores)
	Center Wavelength	—	1300nm
	Maximum Length	100m	2000m
	Number of Ports	4 ports	4 ports
	Port Name	B1, B2, B3, B4	1, 2, 3, 4
	Protection	Surge	—
Port Connection	B1-1, B2-2, B3-3, B4-4 (fixed)		

*1: Connect to YFGW410

*2: Connect to YFGW510. In outdoor wiring, use optical fiber cables with a nonmetallic tension member.

■ Installation Environment

Temperature Range:

Operating: -40 to +65°C (altitude : up to 2000m)
 -40 to +55°C (altitude : more than 2000m,
 up to 3000m)
 Storage: -40 to +85°C

Humidity Range:

Operating: 5 to 95 %RH (non-condensation)
 Storage: 5 to 95 %RH (non-condensation)

Temperature gradient:

Operating: ±10°C/h or less
 Storage: ±20°C/h or less

Power Supply:

Voltage Range : 10.8~26.4 V DC
 Rated Power Supply : 24 V DC
 Momentary Power Failure : Instant Disconnection
 DC Power Supply Ripple Ratio : 1%p-p or less

Power Consumption:

Max. 10 W

Degrees of Protection:

IP20

Vibration resistance:

0.15 mm P-P (5~58 Hz), 1 G (58~150 Hz)

Shock resistance:

15 G 11 ms

Noise resistance:

Electric field : 3 V/m or less (80MHz~1GHz)
 Electrostatic discharges: 4 kV or less (contact discharge), 8 kV or less (aerial discharge)

Grounding:

Class-D grounding (no sharing ground with others)

Cooling:

Natural Air Cooling

■ Regulatory Compliance Statements

CE Conformity:

- EMC: EN61326-1 Class A, Table 2, EN55011 Class A group1, EN61000-6-2

Safety Requirements:

CSA C22.2 No. 61010-1 (Indoor use only)

■ Physical Specifications

Housing Material:

Aluminum alloy plate with polyester, mint-green paint (Munsell 5.6BG 3.3/2.9 or its equivalent)

External Dimension:

150 x 60 x 140 mm (not include projection)

Weight:

Approx. 1.0 kg

Mounting:

DIN RAIL Mounting

■ MODEL AND SUFFIX CODES

Model	Suffix Code	Descriptions	
YFGW610	Field Wireless Media Converter	
General Specifications	Output signal -B	100 BASE-FX (Optical network)	
	Manual Language	0	Japanese
		1	English
	Mounting Bracket D	DIN RAIL Mounting	
	—	A	Always A
—	A	Always A	
Option Codes		/□ Optional Specifications	

■ OPTIONAL SPECIFICATIONS (For Explosion Protected Types)

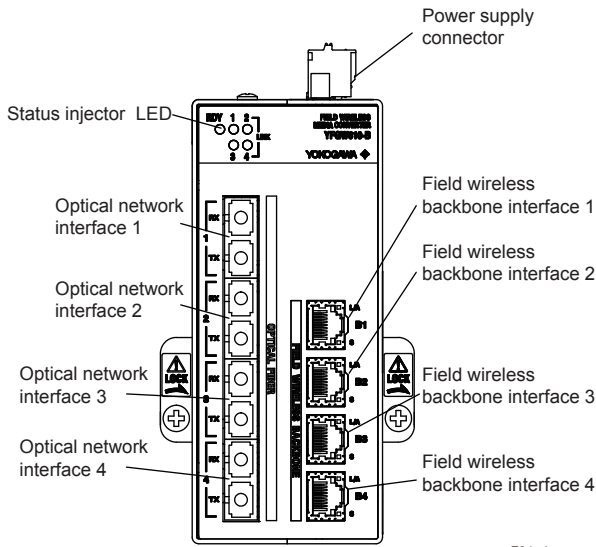
Item	Specification	Code
Factory Mutual (FM)	Nonincendive Approval *1	—
ATEX	ATEX Type n declaration *2 Applicable Standard: EN 60079-0:2012, EN 60079-15:2010 II 3 G Ex nA IIC T4 Gc X Amb. Temp.(Tamb): -40 to 65°C (altitude: up to 2000 m), -40 to 55°C (altitude: more than 2000 m, up to 3000 m)	KN27
Canadian Standards Association (CSA)	Nonincendive Approval *1	—
IECEX	Type n Approval *2	—

*1: To be compliant with these standards, the YFGW610 hardware needs to be installed in a lockable metal cabinet.

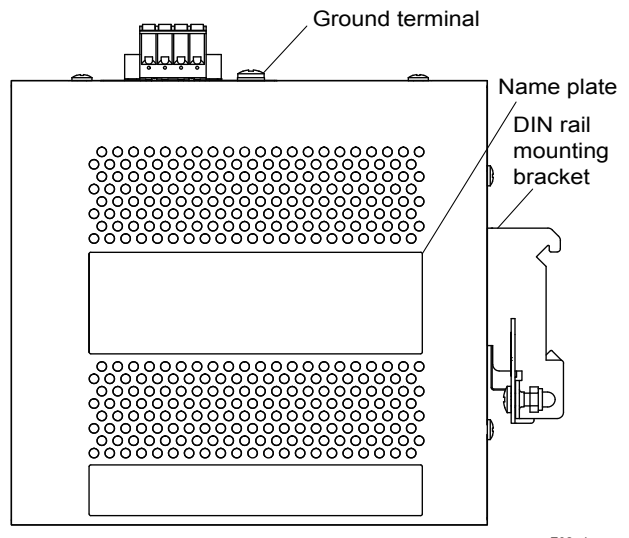
*2: To be compliant with these standards, the YFGW610 hardware needs to be installed in a lockable metal cabinet of IP54 or higher protection rating.

■ APPEARANCES

■ Front view

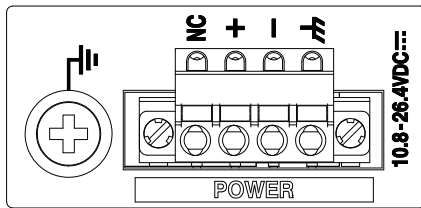


■ Right side



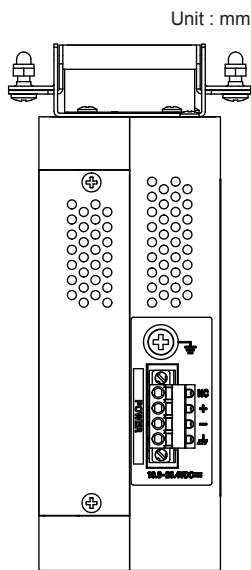
■ TERMINAL CONFIGURATION

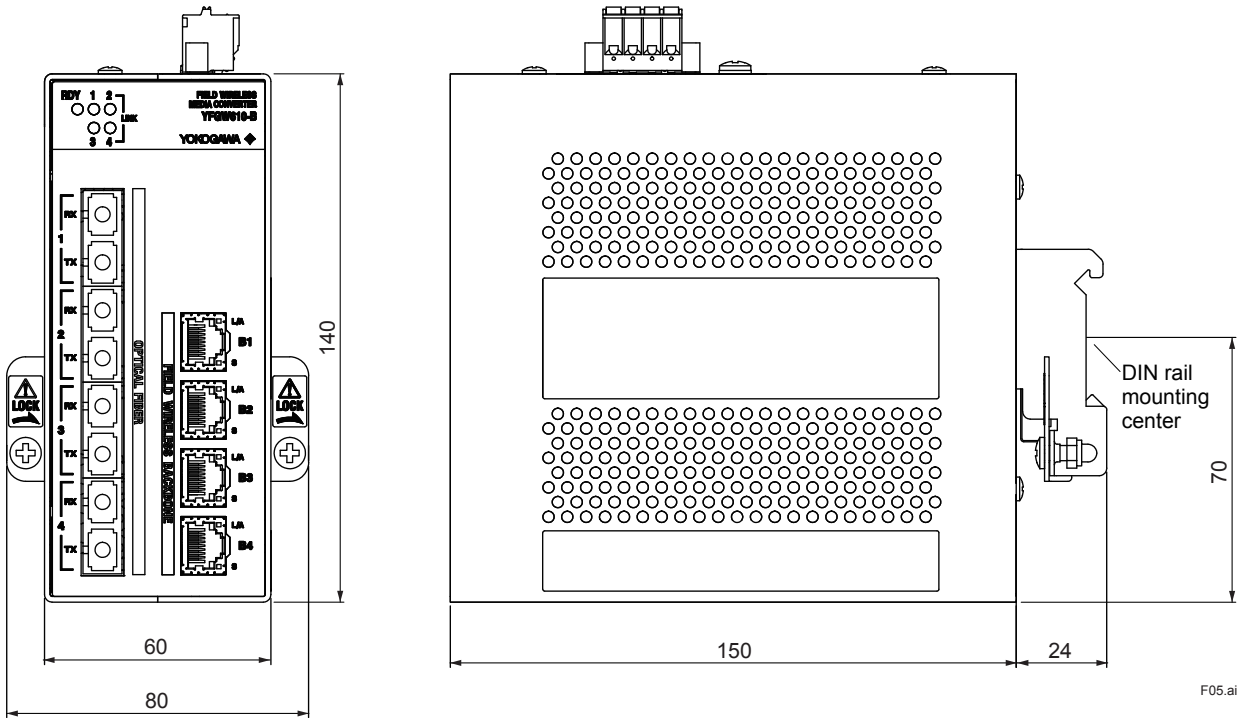
■ Power supply



Terminal	Signal
NC	No Connection
+	24 V DC Hot
-	24 V DC Neutral
⏏	Frame Ground

■ EXTERNAL DIMENSIONS





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■ ORDERING INFORMATION

When ordering, specify the model, suffix codes, and option codes.

■ RELATED PRODUCTS GENERAL SPECIFICATIONS

Field Wireless System Overview:

Refer to GS 01W01A01-01EN

Field Wireless Management Station YFGW410:

Refer to GS 01W02D02-01EN

Field Wireless Access Point YFGW510:

Refer to GS 01W02E01-01EN

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