Honeywell

OneWireless Adapter

Professional Installation Guide

34-XY-25-48
Revision 1
May 2011

Notices and Trademarks

Copyright 2011 by Honeywell International Inc.
Revision 1, May 2011

While this information is presented in good faith and believed to be accurate, Honeywell disclaims the implied warranties of merchantability and fitness for a particular purpose and makes no express warranties except as may be stated in its written agreement with and for its customers.

In no event is Honeywell liable to anyone for any indirect, special or consequential damages. The information and specifications in this document are subject to change without notice.

Honeywell, PlantScape, Experion PKS, and **TotalPlant** are registered trademarks of Honeywell International Inc.

Other brand or product names are trademarks of their respective owners.

Honeywell Process Solutions

1860 West Rose Garden Lane

Phoenix, Arizona 85027

About This Document

This document outlines professional installation requirements for the Honeywell OneWireless Adapter. Professional installation is required to comply with certification agency and legal requirements. This document must be adhered to for all installations of the Honeywell OneWireless Adapter.

Honeywell does not recommend using devices for critical control where there is a single point of failure or where single points of failure result in unsafe conditions. OneWireless is targeted at open loop control, supervisory control, and controls that do not have environmental or safety consequences. As with any process control solution, the end-user must weigh the risks and benefits to determine if the products used are the right match for the application based on security, safety, and performance. Additionally, it is up to the end-user to ensure that the control strategy sheds to a safe operating condition if any crucial segment of the control solution fails.

Revision Information

Document Name	Document ID	Revision Number	Publication Date
OneWireless Adapter Professional Installation Guide	34-XY-25-48	Revision 1	May 2011

References

The following list identifies all documents that may be sources of reference for material discussed in this publication.

Document Title
Getting Started with Honeywell OneWireless Solutions

Support and contact info

United States and Canada

Contact: Honeywell Process Solution
- Global Technical Support - Phone: 001-800-423-9883
- Customer Service (HFS) - Phone: 001-800-343-0228
- Outside United States - Phone: 001-215-641-3610

Calls are answered by dispatcher between 6:00 am and 4:00 pm Mountain Standard Time. Emergency calls outside normal working hours are received by an answering service and returned within one hour.

Email support: ask-ssc@honeywell.com

Mail: Honeywell Process Solutions
1860 West Rose Garden Lane,
Phoenix, AZ, 85027

Europe

Contact: Honeywell TAC-EMEA
Phone: +32-2-728-2732
Facsimile: +32-2-728-2696
Mail: TAC-BE02
Hermes Plaza
Hermeslaan, 1H
B-1831 Diegem, Belgium

Pacific

Contact: Honeywell Global TAC – Pacific
Phone: 1300-300-4822 (toll free within Australia)
+61-8-9362-9559 (outside Australia)
Facsimile: +61-8-9362-9564
Mail: Honeywell Limited Australia
5 Kitchener Way
Burswood 6100, Western Australia
Email: GTAC@honeywell.com

India

Contact: Honeywell Global TAC – India
Phone: +91-20- 6603-9400
Facsimile: +91-20- 6603-9800
Mail: Honeywell Automation India Ltd.
56 and 57, Hadapsar Industrial Estate
Hadapsar, Pune –411 013, India
Email: Global-TAC-India@honeywell.com

Korea

Contact: Honeywell Global TAC – Korea
Phone: +82-2-799-6317
+82-11-9227-6324
Facsimile: +82-2-792-9015
Mail: Honeywell Co., Ltd
17F, Kikje Center B/D,
191, Hangangro-2Ga
Yongsan-gu, Seoul, 140-702, Korea
Email: Global-TAC-Korea@honeywell.com

People's Republic of China

Contact:	Honeywell Global TAC – China
Phone:	+86- 21-5257-4568
Mail:	Honeywell (China) Co., Ltd 33/F, Tower A, City Center, 100 Zunyi Rd. Shanghai 200051, People's Republic of China
Email:	Global-TAC-China@honeywell.com

Singapore

Contact:	Honeywell Global TAC – South East Asia
Phone:	+65-6580-3500
Facsimile:	+65-6580-3501 +65-6445-3033
Mail:	Honeywell Private Limited Honeywell Building 17, Changi Business Park Central 1 Singapore 486073
Email:	GTAC-SEA@honeywell.com

Taiwan

Contact:	Honeywell Global TAC – Taiwan
Phone:	+886- 7- 536-2567
Facsimile:	+886-7-536-2039
Mail:	Honeywell Taiwan Ltd. 17F-1, No. 260, Jhongshan 2nd Road. Cianjhen District Kaohsiung, Taiwan, ROC
Email:	Global-TAC-Taiwan@honeywell.com

Japan

Contact:	Honeywell Global TAC – Japan
Phone:	+81-3-6730-7160
Facsimile:	+81-3-6730-7228
Mail:	Honeywell Japan Inc. New Pier Takeshiba, South Tower Building, 20th Floor, 1-16-1 Kaigan, Minato-ku, Tokyo 105-0022, Japan
Email:	Global-TAC-JapanJA25@honeywell.com

World Wide Web

Honeywell Solution Support Online:

http://www.honeywell.com/ps/hfs

Elsewhere

Call your nearest Honeywell office.

Training Classes

Honeywell Automation College:

http://www.automationcollege.com

Symbol Definitions

The following table lists those symbols used in this document to denote certain conditions.

Symbol	Definition
	**ATTENTION:** Identifies information that requires special consideration.
	**TIP:** Identifies advice or hints for the user, often in terms of performing a task.
CAUTION	Indicates a situation which, if not avoided, may result in equipment or work (data) on the system being damaged or lost, or may result in the inability to properly operate the process.
	**CAUTION**: Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. **CAUTION** symbol on the equipment refers the user to the product manual for additional information. The symbol appears next to required information in the manual.
	**WARNING**: Indicates a potentially hazardous situation, which, if not avoided, could result in serious injury or death. **WARNING** symbol on the equipment refers the user to the product manual for additional information. The symbol appears next to required information in the manual.
	**WARNING, Risk of electrical shock**: Potential shock hazard where HAZARDOUS LIVE voltages greater than 30 Vrms, 42.4 Vpeak, or 60 VDC may be accessible.
	**ESD HAZARD:** Danger of an electro-static discharge to which equipment may be sensitive. Observe precautions for handling electrostatic sensitive devices.
	**Protective Earth (PE) terminal**: Provided for connection of the protective earth (green or green/yellow) supply system conductor.
	**Functional earth terminal**: Used for non-safety purposes such as noise immunity improvement. NOTE: This connection shall be bonded to Protective Earth at the source of supply in accordance with national local electrical code requirements.
	**Earth Ground**: **Functional earth connection.** NOTE: This connection shall be bonded to Protective Earth at the source of supply in accordance with national and local electrical code requirements.
	**Chassis Ground**: Identifies a connection to the chassis or frame of the equipment shall be bonded to Protective Earth at the source of supply in accordance with national and local electrical code requirements.

continued

Symbol	Description
	The Factory Mutual® Approval mark means the equipment has been rigorously tested and certified to be reliable.
	The Canadian Standards mark means the equipment has been tested and meets applicable standards for safety and/or performance.
	The Ex mark means the equipment complies with the requirements of the European standards that are harmonized with the 94/9/EC Directive (ATEX Directive, named after the French "ATmosphere EXplosible").
	For radio equipment used in the European Union in accordance with the R&TTE Directive the CE Mark and the notified body (NB) identification number is used when the NB is involved in the conformity assessment procedure. The alert sign must be used when a restriction on use (output power limit by a country at certain frequencies) applies to the equipment and must follow the CE marking.
	The C-Tick mark is a certification trade mark registered to ACMA (Australian Communications and Media Authority) in Australia under the Trade Marks Act 1995 and to RSM in New Zealand under section 47 of the NZ Trade Marks Act. The mark is only to be used in accordance with conditions laid down by ACMA and RSM. This mark is equal to the CE Mark used in the European Union. N314 directly under the logo is Honeywell's unique supplier identification number.
	The ISA100 Wireless Compliant logo indicates the device has received ISA100.11a conformance certification and is registered with the Wireless Compliance Institute, assuring device interoperability.

Contents

Support and contact info iv

1. DESIGNATION, SCOPE AND PREFACE 1

1.1 Designation 1

1.2 Scope 1

1.3 Preface 1

1.4 Site survey 1

1.5 Abbreviations & Definitions 2

2. FEDERAL COMMUNICATION COMMISSION (FCC) 4

2.1 FCC Compliance Statement 4

2.2 Industry Canada (IC) 4

2.2.1 IC Compliance Statements 4

2.2.2 RF Safety Statement 4

2.3 FCC and Industry Canada (IC) Identification Numbers 5

2.4 Intended Country Usage 6

2.4.1 NORTH AMERICA 6

2.4.2 EUROPEAN UNION 6

3. ONEWIRELESS ADAPTER GENERAL DESCRIPTION 7

3.1 Intended Used 7

4. PRODUCT SPECIFICATION 8

4.1 ISA100 Radio, 2.4 GHz 8

4.2 OneWireless Adapter User Environment 8

4.3 OneWireless Adapter Power Specifications 9

4.4 Weight 9

4.5 Dimensions 9

5. APPROVED ANTENNA TYPES/GAINS 10

5.1 Antenna Details 10

6. EQUIVALENT ISOTROPICALLY RADIATED POWER (EIRP) 11

6.1 EIRP LIMITS 11

7. SETTING TX POWER 13

7.1 TX Power Setting 13

8. AGENCY LABEL INFORMATION 14

8.1 External FCC/IC Labels 14
8.1.1 50016195-001 – Transmitters with FHSS Radios 14
8.1.2 Internal FCC/IC Labels 14

9. RF SAFETY, MAXIMUM PERMISSIBLE EXPOSURE (MPE) STATEMENT 15

9.1 MPE Statement 15

10. AGENCY COMPLIANCE 16

10.1 Radio and EMC Certifications 16
10.1.1 Federal Communication Commission (FCC) 16
10.1.2 Industry Canada (IC) 16
10.1.3 European Telecommunications Standards Institute (ETSI) 16

10.2 Product Safety Agency Certifications 16
10.2.1 Canadian Standards Association (CSA) 16
10.2.2 Factory Mutual (FM) 17
10.2.3 European ATEX Certification (ATEX) 17
10.2.4 IECEx Certification 18
10.2.5 European Union Certification (CE-mark) 18

11. REFERENCE DOCUMENTS 19

11.1 OneWireless reference documentation 19

Tables

Table 1-1 –Table of Abbreviations and Definitions....2
Table 4-1 Specifications ISA100 Radio Module in OneWireless Adapter....8
Table 4-2 User Environment Specifications for OneWireless Adapter Transmitter....8
Table 5-1 Approved Antenna Types/Gains....10
Table 6-1 Maximum EIRP Limits for DSSS and ISA100 Radios....11
Table 6-2– Factory Transmit Power Settings for FCC, IC and ETSI....12
Table 11-1 – Reference documents....19

Figures

Figure 4-1 OneWireless Adapter Dimensions 9

1. Designation, Scope and Preface

1.1 Designation

This document is valid for the OneWireless Adapter (OWA). The OneWireless Adapter is intended to be directly connected to a HART device or network and provide a wireless interface between the wired HART network and the wireless ISA100 network.

1.2 Scope

This document outlines professional installation requirements for the Honeywell OneWireless Adapter. Professional installation is required to comply with certification agency and legal requirements. This document must be adhered to for all installations of the Honeywell OneWireless Adapter.

1.3 Preface

This manual covers professional installation of the Honeywell OneWireless Adapter. See the Getting Started with Honeywell OneWireless, Honeywell OneWireless Planning Guide and Honeywell OneWireless Adapter User's Guides for general information on overall system implementation, configuration, and management of these devices.

The OneWireless Adapter is classified by the FCC as a device that must be professionally installed.

1.4 Site survey

It is assumed for the purposes of this document that a site survey has been performed and that the OneWireless Adapter is installed in a location consistent with the Model Selection Guide selection. Any changes to the location as a result of the actual installation of the OneWireless Adapters into the site may require that the TX power setting of the radio board needs to be adjusted from the factory setting in order to maintain agency approvals. See Equivalent Isotropically Radiated Power (EIRP) and Setting TX Power for more information.

1.5 Abbreviations & Definitions

The term **Honeywell OneWireless Adapter** will be used to describe the composite unit which includes the Honeywell ISA100 RF Module and all subassemblies housed within the OneWireless Adapter enclosure.

Table 1-1 –Table of Abbreviations and Definitions

ACMA	Australian Communications and Media Authority
AD	Authentication Device
ATEX	Potentially Explosive Atmospheres Directive
AWG	American Wire Gauge
Co-located	Two or more radios transmitting simultaneously and with less than 20cm of separation distance.
CSA	Canadian Standards Association
DCS	Distributed Control System
DSSS	Direct Sequence Spread Spectrum
EMC	Electromagnetic Compatibility
ETSI	European Telecommunications Standards Institute
EU	European Union
FCC	Federal Communications Committee
FHSS	Frequency-Hopping Spread Spectrum
FM	Factory Mutual
FSK	Frequency Shift Keying
GFSK	Gaussian Frequency Shift Keying
GTS	Honeywell Global Technical Services
IC	Industry Canada
IEEE	Institute of Electrical and Electronics Engineers
IR	Infrared
IrDA	Infrared Data Association
ISA100	International Society of Automation open-standard wireless networking technology
HART	Highway Addressable Remote Transducer Communications Protocol
MIC	Japan Ministry of Internal Affairs and Communications
MPE	Maximum Permissible Exposure
MSG	Honeywell Model Selection Guide

NA	North America – United States of America and Canada
NEMA	National Electrical Manufacturers Association
OQPSK	Offset Quadrature Phase-Shift Keying
OWA	OneWireless Adapter
TELEC	Japan Telecom Engineering Center
TIIS	Japan Technology Institution of Industrial Safety
TX	Transmit
Wi-Fi	Wireless Local Area Network based on IEEE 802.11 Specifications
WNSIA	Wireless Network for Secure Industrial Application

2. Federal Communication Commission (FCC)

2.1 FCC Compliance Statement

- This device complies with Part 15 of FCC Rules and Regulations. 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.
- 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 in a residential installation. This equipment generates, uses, and can radiate radiofrequency energy and, if not installed and used in accordance with these instructions, 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.
- Intentional or unintentional changes or modifications must not be made to the OneWireless Adapter unless under the express consent of the party responsible for compliance. Any such modifications could void the user's authority to operate the equipment and will void the manufacturer's warranty.

2.2 Industry Canada (IC)

2.2.1 IC Compliance Statements

- To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropic radiated power (EIRP) is not more than that permitted for successful communication.
- 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.
- This Class A digital apparatus complies with Canadian ICES-003.
- French: Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

2.2.2 RF Safety Statement

To comply with FCC's and Industry Canada's RF exposure requirements, the following antenna installation and device operating configurations must be satisfied.

- Remote Point-to-Multi-Point antenna(s) for this unit must be fixed and mounted on outdoor permanent structures with a separation distance between the antenna(s) of greater than 20cm and a separation distance of at least 20cm from all persons.
- Furthermore, when using integral antenna(s) the OneWireless Adapter unit must not be co-located with any other antenna or transmitter device and have a separation distance of at least 20cm from all persons.

2.3 FCC and Industry Canada (IC) Identification Numbers

This information is shown on the label attached to each RF Module.

- Honeywell OneWireless Adapter Radio Module Identification
    - Honeywell Identification for Intrinsically Safe RF Modules: **50025034-002**

- Honeywell OneWireless Adapter Radio Limited Modular Approval
    - Federal Communication Commission Identification for Intrinsically Safe RF Modules: **S5750016517**
    - Industry Canada Identification for Intrinsically Safe RF Modules: **573I-50025034**

2.4 Intended Country Usage

2.4.1 NORTH AMERICA

Country	ISO 3166 2 letter code
Canada	CA
United States	US

2.4.2 EUROPEAN UNION

Country	ISO 3166 2 letter code	Country	ISO 3166 2 letter code
Austria	AT	Latvia	LV
Belgium	BE	Liechtenstein	LI
Bulgaria	BG	Lithuania	LT
Cyprus	CY	Malta	MT
Czech Republic	CZ	Netherlands	NL
Denmark	DK	Norway	NO
Estonia	EE	Poland	PL
Finland	FI	Portugal	PT
France	FR	Romania	RO
Germany	DE	Slovakia	SK
Greece	GR	Slovenia	SI
Hungary	HU	Spain	ES
Iceland	IS	Sweden	SE
Ireland	IE	Switzerland	CH
Italy	IT	United Kingdom	BG

3. OneWireless Adapter General Description

3.1 Intended Used

The OneWireless Adapter is a key component of the Honeywell *Wireless Network for Secure Industrial Application (WNSIA).* These transmitters are available for various sensor types including Digital Inputs, Temperature, High Level Analog Inputs, Pressure and Corrosion. The OneWireless Adapter uses a low-powered ISA100 2.4 GHz radio to communicate with Radio Infrastructure and Gateway devices that are connected to a wired DCS network.

4. Product Specification

4.1 ISA100 Radio, 2.4 GHz

WARNING!

- The OneWireless Adapter must be Professionally Installed in accordance with the requirements specified in this document. See Section 10, for professional installation maximum TX power setting requirements. Only the specified TX power settings, antenna types and gains and cable lengths (attenuation) as outlined in this document are valid for OneWireless Adapter installations.

Table 4-1 Specifications ISA100 Radio Module in OneWireless Adapter

Item	Specification
Wireless Standard	FCC 15.247 / IEEE 802.15.4 Direct Sequence Spread Spectrum (DSSS), 2.4 GHz
Data Rates and Modulation	Data Rate: 250 kbps Modulation: Offset Quadrature Phase-Shift Keying (OQPSK – DSSS)
Frequency Band	2,405 – 2,475 MHz
Module Transmit Power	Maximum: 20 dBm (Maximum transmit power will vary by channel)
Receive Sensitivity (typical)	-100 dBm

4.2 OneWireless Adapter User Environment

Table 4-2 User Environment Specifications for OneWireless Adapter Transmitter

Item	Specification
Operating Temperature:	–40ºC to +85ºC (–40°F to +185°F)
Storage Temperature:	–40ºC to +85ºC (–40°F to +185°F)
Operating Humidity:	0 to 100% RH

Other Environmental specifications and information may be found in the appropriate Instrument Specification available on the Honeywell website.

4.3 OneWireless Adapter Power Specifications

The OneWireless Adapter operates from one (a) D-size 3.6V Lithium Thionyl Chloride (Li/SOCl2) battery and from power scavenging from the 4-20mA loop to which it is attached.

4.4 Weight

The weight of the complete OneWireless Adapter unit is 1 lb. (0.45 kg).

4.5 Dimensions

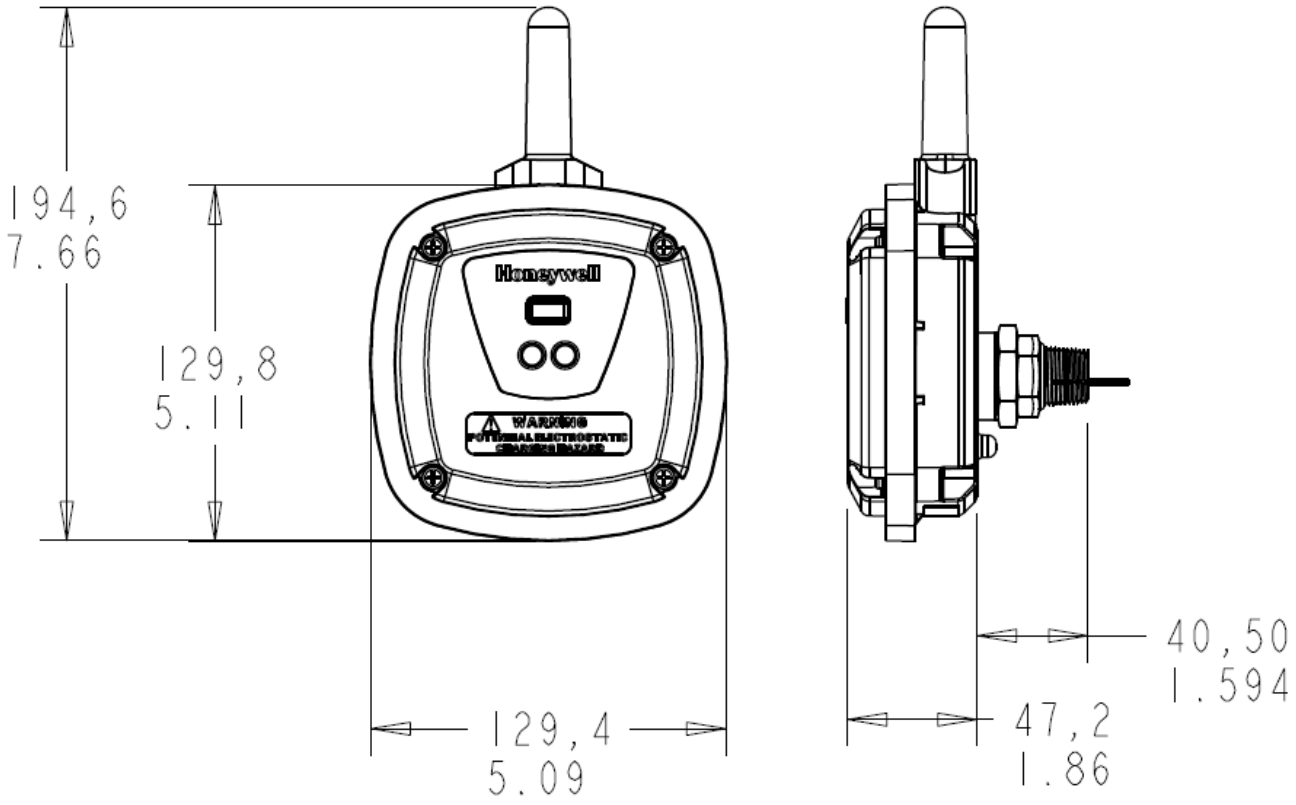


Figure 4-1 OneWireless Adapter Dimensions

5. Approved Antenna Types/Gains

5.1 Antenna Details

Table 5-1 Approved Antenna Types/Gains

Antenna Type	Antenna Application	Manufacturer	Manufacturer Part Number	Honeywell Part Number	Beam Width	Peak Gain (dBi)	Freq. (GHz)	Agency Compliance
Omni (integral)	Point to Multi-Point	CENTURION	WCP2400-MMCX4	50053590-001	Omni	2.5	2.4	FCC, IC, ETSI

The antenna impedance is 50 ohms.

6. Equivalent Isotropically Radiated Power (EIRP)

In radio communication systems, Equivalent Isotropically Radiated Power (EIRP) or, alternatively, Effective Isotropic Radiated Power, is the amount of power that would have to be emitted by an isotropic antenna (that evenly distributes power in all directions and is a theoretical construct) to produce the peak power density observed in the direction of maximum antenna gain. EIRP can take into account the losses in transmission line and connectors and includes the gain of the antenna. The EIRP is often stated in terms of decibels over a reference power level that would be the power emitted by an isotropic radiator with an equivalent signal strength. The EIRP allows making comparisons between different emitters regardless of type, size or form. From the EIRP, and with knowledge of a real antenna's gain, it is possible to calculate real power and field strength values.

EIRP(dBm) = Radio TX Power (dBm) – Cable Loss (dB) + Antenna Gain(dBi)

Antenna gain is expressed relative to a (theoretical) isotropic reference antenna (dBi).

6.1 EIRP LIMITS

Table 6-1 Maximum EIRP Limits for DSSS and ISA100 Radios

Antenna Type	Radio Usage / Application		Freq. (GHz)	Max. Ant. Gain (dBi)	Agency/Country	Max. TX Power Setting (dBm) [1]	Max. EIRP (dBm) [7]
2.5 dBi Omni	Point to Multi-Point	Integral	2.4	2.5	FCC, IC	20	22
					ETSI	9	12

Notes for Table 6-1:

1. The Maximum TX Power Setting values given in Table 6-1 represent the power produced by the Radio circuit within the RF Module. These Maximum TX Power Setting values do not include antenna gain nor do they include the losses caused by the enclosure, cables and connectors. When these external gains and losses are included, then using these Maximum TX Power Setting values ensures that the OneWireless Adapter EIRP will not exceed the maximum EIRP limits that are given in Table 6-1.
2. The values in the above tables have been determined through agency certification testing.
3. The following shall apply for antenna type, frequency range, application/usage and agency/country compliance:
   - Antenna gains above the maximum values shown shall not be used.
   - Maximum overall radio output power shown shall not be exceeded.
   - Maximum EIRP values shown above shall not be exceeded.
4. **Industry Canada Compliance Statement**: This device has been designed to operate with the antenna types listed in this document. Antenna types not included in this list are strictly prohibited for use with this device.

Table 6-2– Factory Transmit Power Settings for FCC, IC and ETSI

Description	TX Power Setting for ETSI [3] (dBm)	TX Power Setting for FCC/IC [3] (dBm)
2.5 dBi Integral Antenna	9	14

Notes for Table 6-2:

1. The Model Number of any instrument may be found on the identification name plate located on the outside of the OneWireless Adapter.
2. TX Power is set by the Honeywell factory producing the OneWireless Adapter. The factory set value for TX power is determined by the customer's model number selections in the Model Selection Guide in Table II for Country Code and is consistent with the values shown in Table 6-2. If the Country location is changed in the field away from the Model Number listed on the instrument's nameplate, then the TX power setting should likewise be changed per the table above to match the new Country selection. See Setting TX Power.
3. The TX Power Setting values given in and Table 6-2 represent the power produced by the Radio circuit within the RF Module. These TX Power Setting values do not include antenna gain. When this external gain is included, then using the TX power values in Table 6-2 ensures that the OneWireless Adapter EIRP will not exceed the maximum EIRP limits that are given in Table 6-1.

7. Setting TX Power

7.1 TX Power Setting



WARNING!

- The OneWireless Adapter must be Professionally Installed in accordance with the requirements specified in this document. Only the specified power settings, antenna types and gains and cable lengths (attenuation) as outlined in this document are valid for OneWireless Adapter installations. .

The OneWireless Adapter as shipped from the factory will have its TX Power value set according to its Model Number and this value is consistent with those values given in

Table 6-2

The TX Power setting may be changed via the Authentication Device when a special application (app) is installed. This app is considered to be Honeywell sensitive material and is made available only to the qualified Professional Installer. Due to radio approval body regulations, changing the TX Power setting is only available if the professional installer option has been explicitly enabled on your Authentication Device. If you do not have the professional installer option enabled and would like to do so, then please contact Honeywell Global Technical Services (GTS). A separate application, AuthDev Power Settings, is required to enable the "Write TX Power Level" option.

When this app is installed in the AD, the TX power setting, normally a read-only parameter, becomes a read/write parameter.

The TX Power adjustment feature is provided for Professional Installers to adjust the OneWireless Adapter TX power to match a change in the selection of antenna and cables made at the installation site and still ensure that the EIRP does not exceed the regulatory limits.

8. Agency Label Information

The following information shall be clearly and permanently labeled on the XYR 6000 Transmitter unit:

8.1 External FCC/IC Labels

8.1.1 50016195-001 – Transmitters with FHSS Radios

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. FCC ID: S5750025034 / IC: 573I-50025034



8.1.2 Internal FCC/IC Labels

50021957-004

RF MOD 50025034-002
FCC ID: S5750025034
IC: 573I-50025034

9. RF Safety, Maximum Permissible Exposure (MPE) Statement

9.1 MPE Statement

To comply with FCC's and Industry Canada's RF exposure requirements, the following antenna installation and device operating configurations must be satisfied:

The OneWireless Adapter unit must not be co-located with any other antenna or transmitter device and have a separation distance of at least 20 cm from all persons.

10. Agency Compliance

10.1 Radio and EMC Certifications

10.1.1 Federal Communication Commission (FCC)

- Specification: FCC Part 15.247 Subpart B for unintentional radiators
- Specification: FCC Part 15.247 Subpart C for intentional radiators

10.1.2 Industry Canada (IC)

- Method: RSS-210, Issue 7
- RSS-Gen, Issue 2
- ICES-003, Issue 4

10.1.3 European Telecommunications Standards Institute (ETSI)

- Emissions Specification and Method: EN 300 328 V1.7.1
- Emissions Spec and Method: EN 301 893 V1.3.1
- Immunity Specification: EN 301 489-17 V1.2.1
- Immunity Method: EN 301 489-1 V1.6.1
- Product Standard: IEC61326-1 (1st Edition, 2002-02, Industrial Locations)

10.2 Product Safety Agency Certifications

10.2.1 Canadian Standards Association (CSA)

- ANSI/ISA S82.02.01 (61010-1) CSA C22.2 No. 1010-1, ANSI/UL 61010-1, Safety Standard for Electrical Equipment for Measurement, Control and Laboratory Use – Part 1: General Requirements
- C22.2 No. 0, General Requirements - Canadian Electrical Code, Part II
- C22.2 No. 94, Special Purpose Enclosures, Industrial Products
- C22.2 No. 142, Industrial Control Equipment, Industrial Products
- C22.2 No. 157, Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
- C22.2 No. 213, Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
- E60079-0, Electrical Apparatus for Explosive Gas Atmospheres, Part 0: General Requirements
- E60079-15, Electrical Apparatus for Explosive Gas Atmospheres, Part 15: Electrical Apparatus With Type of Protection "n"
- CSA C22.2 No. 60529, Degrees of Protection Provided by Enclosures (IP Code)

- CSA E61241-1-1, Electrical Apparatus for Use in the Presence of Combustible DustTemperature code: T4 (135°C) based on the maximum specified ambient of 85°C.

10.2.2 Factory Mutual (FM)

- ANSI/ISA S82.02.01 (61010-1) CSA C22.2 No. 1010-1, ANSI/UL 61010-1, Safety Standard for Electrical Equipment for Measurement, Control and Laboratory Use – Part 1: General Requirements
- Factory Mutual Approval Standard Class No. 3600, "Electrical Equipment for Use in Hazardous (Classified) Locations – General Requirements
- Factory Mutual Approval Standard Class No. 3810, "Electrical and Electronic Test, Measuring, and Process Control Equipment
- Factory Mutual Approval Standard Class No. 3611, "Electrical Equipment for Use in Class I, Division 2, Class II, Division 2 and Class III, Division 1 and 2 Hazardous (Classified) Locations
- ANSI/NEMA 250, Enclosures for Electrical Equipment (1,000 Volts Maximum)
- ANSI/ISA -12.00.01-2002 (IEC 60079-0 Mod), Electrical Apparatus for Explosive Gas Atmospheres – General Requirements
- ANSI/ISA -12.02.01-2002 (IEC 60079-11 Mod), Electrical Apparatus for Explosive Gas Atmospheres – Intrinsic Safety
- ANSI/IEC 60529, Degrees of protection provided by enclosures (IP Code)
- ANSI/ISA 60079-31 (12.10.03), Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure "t"
- ANSI/ISA -12.12.01-2003 (IEC 60079-15 Mod), Electrical Apparatus for Explosive atmospheres – Part 15: Equipment protection by type of protection "n"
- Temperature code: T4 (135°C) based on the maximum specified ambient of 85°C.

10.2.3 European ATEX Certification (ATEX)

- EN 60079-0, Electrical Apparatus for Explosive Gas Atmospheres, Part 0: General Requirements
- EN 60079-11, Electrical Apparatus for Explosive Gas Atmospheres, Part 11: Intrinsic Safety "i"
- EN 60079-15, Electrical Apparatus for Explosive Gas Atmospheres, Part 15: Electrical Apparatus with Type of Protection "n"
- EN 60529, Degrees of protection provided by enclosures (IP Code)
- EN 60079-26, Explosive Atmospheres – Part 26: Equipment With Equipment Protection level (EPL) Ga
- EN 60079-31, Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure "t"
- The temperature code for the OneWireless Adapter shall not exceed T4 (135°C) based on the maximum specified ambient of 85°C.

10.2.4 IECEx Certification

- IEC 60079-0, Electrical Apparatus for Explosive Gas Atmospheres, Part 0: General Requirements
- IEC 60079-11, Electrical Apparatus for Explosive Gas Atmospheres, Part 11: Intrinsic Safety "i"
- IEC 60079-15, Electrical Apparatus for Explosive Gas Atmospheres, Part 15: Electrical Apparatus with Type of Protection “n”
- IEC 60529, Degrees of protection provided by enclosures (IP Code)
- IEC 60079-26, Explosive Atmospheres – Part 26: Equipment With Equipment Protection level (EPL) Ga
- IEC 60079-31, Explosive Atmospheres – Part 31: Equipment Dust Ignition Protection by Enclosure "t"
- The temperature code for the OneWireless Adapter shall not exceed T4 (135°C) based on the maximum specified ambient of 85°C.

10.2.5 European Union Certification (CE-mark)

- Compliance with:
  - R&TTE Directive 1999/5/EC
  - EMC Directive 2004/108/EC
  - ATEX Directive 94/9/EC

11. Reference Documents

11.1 OneWireless reference documentation

Table 11-1 – Reference documents

1	Getting Started with Honeywell OneWireless
2	Honeywell OneWireless Planning Guide
3	OneWireless OneWireless Adapter Model Selection Guides
4	Honeywell OneWireless Adapter User's Manuals
5	Honeywell OneWireless System Administration Guide
6	Honeywell OneWireless Field Network Dictionary
7	OneWireless Builder Parameter Reference
8	OneWireless Builder User's Guide

These reference documents may be found on the Honeywell HPS website for Wireless Instrumentation.
www.honeywell.com/ps/wireless/

Sales and Service
For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact one of the offices below.

Asia Pacific Global Technical Support

Field Instruments
Phone: +65 6580 3156
Fax: +65 6445-3033

Australia
Honeywell Limited
Phone: +(61) 7-3846 1255
FAX: +(61) 7-3840 6481
Toll Free 1300-36-39-36
Toll Free Fax:
1300-36-04-70

China – PRC - Beijing
Honeywell China Inc.
Phone: +(86-10) 8458-3280
Fax: +(86-10) 8458-4650

China – PRC - Shanghai
Honeywell China Inc.
Phone: (86-21) 5257-4568
Fax: (86-21) 6237-2826

China – PRC - Chengdu
Honeywell China Inc.
Phone: +(86-28) 6613-5078
Fax: +(86-28) 8678-7061

China – PRC - Xi'an
Honeywell China Ltd - Xi'an.
Phone: +(86-29) 8833-7490
Fax: +(86-29) 8833-7489

China – PRC - Shenzhen-
Honeywell China Inc.
Phone: +(86) 755-2518-1226
Fax: +(86) 755-2518-1221

Indonesia
PT Honeywell Indonesia
Phone: +(62) 21-535-8833
FAX: +(62) 21-5367 1008

Honeywell Automation India Ltd.
Honeywell Ltd.
Phone:+(91) 6603-9400
Fax: +(91) 6603-9600

Japan
Honeywell Inc.
Phone: +(81) 3 6730 7197
Fax: +(81) 3 6730 7228

Malaysia
Honeywell Engineering Sdn Bhd
Phone: +(603) 7958-4788
Fax: +(603) 7958-8922

New Zealand
Honeywell Limited
Phone: +(64-9) 623-5050
Fax: +(64-9) 623-5060
Toll Free (0800) 202-088

Singapore
Honeywell Pte Ltd.
Phone: +(65) 6580 3278
Fax: +(65) 6445-3033

South Korea
Honeywell Korea Co Ltd
Phone: +(822) 799 6114
Fax: +(822) 792 9015

Thailand
Honeywell Systems (Thailand) Ltd.
Phone: +(662) 693-3099
FAX: +(662) 693-3089

Taiwan R.O.C.
Honeywell Taiwan Ltd.
Phone: +(886-2) 2245-1000
FAX: +(886-2) 2245-3243

SE Asia Countries

see Honeywell Pte Ltd (Singapore)
for: Philippines, Pakistan, Cambodia, Guam, Laos, Myanmar, Vietnam, East Timor

SE Asia Countries

see Honeywell Automation India Ltd for:
Bangladesh
Nepal
Sri Lanka

EUROPE

Austria
Honeywell Austria GmbH
Phone: +43 (316)400123
FAX: +43 (316)40017

Belgium
Honeywell SA/NV
Phone:+32 (0)2728 24 07
FAX: +32 (0)2728 22 45

Bulgaria
Honeywell EOOD
Phone: +(359) 2 40 20 900
FAX: +(359) 2 40 20 990

Czech Republic
Honeywell spol. s.r.o.
Phone:+420 242 442 232
FAX: +420 242 442 131

Denmark
Honeywell A/S
Phone: +(45) 39 55 55 55
FAX: +(45) 39 55 55 58

Finland
Honeywell OY
Phone: +358 (0)20752 2753
FAX: +358 (0) 20752 2751

France
Honeywell SA
Phone: +33 (0)1 60198075
FAX: +33 (0)1 60198201

Germany
Honeywell AG
Phone: +49 (69)8064-299
FAX: +49 (69)806497336

Hungary
Honeywell Kft.
Phone: +36-1-451 4300
FAX: +36-1-451 4343

Italy
Honeywell S.p.A.
Phone:+390292146307
FAX: +39 0292146377

The Netherlands
Honeywell B.V.
Phone: +31 (0) 20 5656200
FAX: +31 (0) 20 5656210

Norway
Honeywell A/S
Phone: (45) 39 55 55 55

Poland
Honeywell Sp. zo.o
Phone: +48-22-6060900
FAX: +48-22-6060901

Portugal
Honeywell Portugal Lda
Phone: +351 21 424 5000
FAX: +351 21 424 50 99

Romania
Honeywell Bucharest
Phone: +40 (0) 21 2316437
FAX: +40 (0) 21 2316439

Russian Federation (RF),
Honeywell Field Solutions
Kievskaya str., 7,
Moscow 121059, Russia
Phone +7 (495) 796 98 60
Fax +7 (495) 797 99 64

Slovak Republic
Honeywell s.r.o.
Phone: +421-2-58247 410
FAX: +421-2-58247 415

Spain
Honeywell S.A.
Phone: +34 (0)91313 61 00
FAX: +34 (0)91313 61 30

Sweden
Honeywell AB
Phone: +(46) 8 775 55 00
FAX: +(46) 8 775 56 00

Switzerland
Honeywell AG
Phone: +41 18552448
FAX: +(41) 1 855 24 45

Turkey
Honeywell Turkey A.S.
Phone: +90 216 578 71 00
FAX: +90 216 575 66 35

Ukraine
Honeywell
Tel: +380-44-201 44 74
Fax: +380-44-201-44-75

United Kingdom
Honeywell Control Systems Ltd.
Phone: +44 (0)1344 655251
FAX: +44 (0) 1344 655554

MIDDLE EAST

Abu Dhabi U A E
Middle East Headquarters
Honeywell Middle East Ltd.
Phone: +971 2 4041246
FAX: +971 2 4432536

Sultanate of Oman
Honeywell & Co Oman LLC
Phone: +968 24 701153/ Ext.33
FAX +968 24 787351

Saudia Arabia
Honeywell Turki Arabia Ltd
Jubail Office
Phone: +966-3-341-0140
Fax: +966-3-341-0216
Honeywell - ATCO
Dammam Office
Phone: 0096638304584
Fax: 0096638338059

Kuwait
Honeywell Kuwait KSC
Phone: +965 242 1327 to 30
Fax: +965 242 8315
And
Phone: +965 326 2934/1821Fax: +965 326 1714

AFRICA

Mediterranean & African Distributors
Honeywell SpA
Phone: +39 (02) 250 10 604
FAX: +39 (02) 250 10 659

South Africa (Republic of) and sub saharan
Honeywell Southern Africa
Honeywell S.A. Pty. Ltd.
Phone: +27 11 6958000
FAX +27 118051504

NORTH AMERICA

Canada
Honeywell LTD
Phone: 1-800-737-3360
FAX: 1-800-565-4130

USA
Honeywell Process Solutions,
Phone: 1-800-423-9883
Or 1-800-343-0228
Email: ask-ssc@honeywell.com

SOUTH AMERICA

Argentina
Honeywell S.A.I.C.
Phone: +(54-11) 4383-3637
FAX: +(54-11) 4325-6470

Brazil
Honeywell do Brasil & Cia
Phone: +(55-11) 7266-1900
FAX: +(55-11) 7266-1905

Chile
Honeywell Chile, S.A.
Phone: +(56-2) 233-0688
FAX: +(56-2) 231-6679

Mexico
Honeywell S.A. de C.V.
Phone: +(52) 55 5259-1966
FAX: +(52) 55 5570-2985

Puerto Rico
Honeywell Inc.
Phone: +(809) 792-7075
FAX: +(809) 792-0053

Trinidad
Honeywell Inc.
Phone: +(868) 624-3964
FAX: +(868) 624-3969

Venezuela
Honeywell CA
Phone: +(58-2) 238-0211
FAX: +(58-2) 238-3391

Honeywell

Honeywell Process Solutions
1860 West Rose Garden Lane
Phoenix, Arizona 85027
http://www.honeywell.com/ps/hfs/

34-XY-25-48 Revision 1
May 2011
©2011 Honeywell International Inc.