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# Honeywell



Limitless™ Wireless Hazardous Area Limit Switches **WBX Series** 



# Limitless<sup>™</sup> WBX Series Wireless Hazardous Area Limit Switch

Honeywell's Limitless™ WBX Series combines the best of Honeywell's MICRO SWITCH™ Heavy Duty limit switches with a point-to-point (P2P) network. It has a variety of remote or built-in antenna options. Wireless-enabled limit switches can be used for position sensing and presence/absence detection for an endless number of applications.

The WBX Series is especially beneficial for remote monitoring applications where wiring or wire maintenance is not physically possible or economically feasible. Combining this greater flexibility with proven harsh-duty packaging can result in increased efficiencies and improved safety for machines, equipment, and operators.

Customers with a global footprint can utilize local Honeywell experts for application and solution support.

### What makes our switches better?

- Enables control in remote parts of application/machinery/ manufacturing plants, where wiring is not possible or feasible
- Ability to reconfigure and network multiple interfaces, or point-to-point with personalized addresses which allows for adding, subtracting, or relocating Limitless™ inputs easily
- Can reduce installation/maintenance costs with no wiring to Limitless™ switches, conduit, strain relief, clips, connectors, junction boxes, etc.
- Wireless operation and signal transmission eliminates the need to physically send maintenance engineers into the field thus reducing installation and operating costs
- Provides an independent layer of protection for equipment, by giving an immediate indication that a remote mechanical device is not positioned or moving correctly
- Batteries are inexpensive, readily available worldwide, and easy to replace. No re-provisioning is required after a battery replacement
- Batteries are readily available and easy to replace



REMOTE MONITORING • RELIABLE GLOBAL APPLICATION AND ENGINEERING SUPPORT

# Features and Benefits

#### **WIRELESS DESIGN**

Radio (license-free and global) WPAN 802.15.4, 2.4 GHz, point-to-point (P2P) provides **reliable**, **flexible**, **and secure wireless transmission**. Up to **305 m [1000 ft] line-of-sight communication** range when used with a Limitless<sup>™</sup> WPMM Series wireless monitor, WDRR Series receiver module, or WMPR receiver module (sold separately).

The use of AES 128 bit encryption ensures that no unregistered node can successfully insert erroneous signals into a network or decode signals from a network, making the network secure from both eavesdropping and sabotage.

### Abilty to install in applications where not previously possible

#### REMOTE CONTROL AND MONITORING

**License-free RF wireless protocol** standards (IEEE 802.15.4) allow for remote control and monitoring of processes and equipment.

#### WIRELESS SWITCHING IN CLASSIFIED ATMOSPHERES

Designed to be used where other wireless products can not. Hazardous location approvals allow it to be **used in a wide range of classified atmospheres**, allowing for greater flexibility, making the Limitless™ WBX product application adaptable.

### A cost-effective solution

#### WELL-SUITED FOR TOUGH ENVIRONMENTS

IP67 (self certified), NEMA 4 sealed metal enclosure, with direct or remote mount antenna options, allows **for use in most harsh environments**. Powder-coated aluminum housing **enhances durability** and **resistance to corrosion**.

#### **RECONFIGURABLE**

Able to reconfigure multiple WBX Series switches **easily allows for adding, subtracting, or relocating** of Limitless™ WBX Series switches. Eliminates issues with wire connection integrity on moving equipment.

#### **REDUCES COSTS**

Can reduce installation and maintenance costs because there are no wires, conduit, strain relief, clips, connectors, connection boxes, etc.

#### **OFF-THE-SHELF BATTERIES**

**Batteries** are available from electrical supply houses and distributors. They are readily available worldwide, thereby eliminating the need for specialized batteries.

#### **GLOBAL USE**

Designed for **global availability**, the WBX Series is suitable for use in most customer applications, simplifying the design-in process, eliminating tooling costs, and reducing manufacturing labor costs.

### Potential Applications



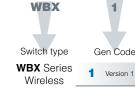
#### **INDUSTRIAL**

- Agriculture machines
- Door position
- Grain diverters or flaps
- Hose attachment verification
- Material handling
- Paint robotics
- Pipeline pigs
- Pump stroke count
- Remote or temporary equipment
- Safety shower alarming
- Valve position

#### **TRANSPORTATION**

Agricultural equipment

#### PRODUCT NOMENCLATURE

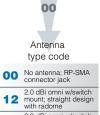






datasheet, 50095584





2.0 dBi omni w/switch mount; 90° metal elbow with radome











Operating

head code



Modification

code Head assembled with actuator to nameplate side

Head assembled with actuator to right side

Head assembled with actuator to left side

Head assembled with actuator to mounting surface





Adjustable, rollerless

Adjust. 0.75 in x 0.25 in nylon roller, back mount

Adjust. 0.75 in x 0.25 in nylon roller, front mount Adjust. 1 in x 0.5 in nylon roller, front mount

Adjust. 1.5 in x 0.25 in nylon roller, front mount

Yoke, 0.75 in x 0.25 in nylon roller, back/front Yoke, 0.75 in x 1.25 in nylon roller, back/front

Yoke, 0.75 in x 0.25 in nylon roller, back/back

04 Hub only

4M Hub rod, 5.5 in, aluminum

Offset, rollerless

Offset, 0.75 in x 0.25 in nylon roller, back mount Offset, 0.75 in x 0.25 in nylon roller, front mount

Short fixed, 0.75 x 0.25 in nylon roller, front mount Short fixed, 0.75 9C x 0.25 in nylon roller, back mount

\* 7A to be assembled to operating head code J only.

#### **Zone Use Classifications**

Zones refer to classified atmosphere ratings. Single digit indicators (Zone 0 or 1) refer to degree of protection from explosive gases. Double digit indicators (Zone 20 or 21) refer to degree of protection from explosive dusts.

Zone 0: An area in which an explosive gas is present continuously or for long periods.

Zone 20: An area in which an explosive dust is present continuously or for long periods.

Zone 1: An area in which an explosive gas is likely to occur in normal operation.

Zone 21: An area in which an explosive dust is likely to occur in normal operation.

**Table 1. Specifications** 

Characteristic	Para	ameter				
Series name		Series				
Product type		us Area Limit Switches				
Availability		se-free bands				
Actuator		side rotary, top plunger, wobble stick				
Lever type		er options available				
Housing material		-cast aluminum body				
Radio/communication protocol	<u>'</u>	Iz radio; WPAN 802.15.4				
Data rate	<u> </u>	kbps				
Operating frequency		2.4 GHz				
Module transmit power	•	e A: 14 dBm max. de B: 8 dBm max.				
Receive sensitivity (typ.)	-98	dBm				
Periodic update interval (seconds)	field programmable interval: 1,	5, 10, 30, or 60 second intervals				
Antenna type	direct or remote mount antenna option	ons; omni directional; straight or elbow				
Signal range (max.)*	etween the WBX switch and monitor/receiver IBi integral antenna					
Battery	3.6 Vdc Lithium Thionyl Chloride; AA size, quantity: 2; see battery details on page 6.					
Battery life	one year at five-second update interval @ 25 °C [77 °F]					
Sealing	NEMA 1, 3, 4, 13; IP67 (self-certified)					
EMC	latest applicable standards: EN 300 328, V1.8.1; EN 61326-1 (2012); EN 301 489-1, V1.9.2; EN 301 489-17, V2.2.1					
Shock	IEC 60068-2-27; half sine, 50 g, 6 mS					
Vibration	IEC 60068-2-6: 10 Hz to 58 Hz w/0,35 mm peak-to-peak, 58 Hz to 500 Hz, 10 g					
Operating temperature	-40 °C to 70 °C	[-40 °F to 158 °F]				
Communication agency approvals and standards	Industry Canada RSS 210 Gen Issue 8					
	UL 60079-0 edition 6;	AN/CSA-C22.2 No. 157-92 (R2012) ; UL 60079-11 edition 6 2; CSA C22.2 No. 60079-0 : 11 edition 2				
cULus standards and certifications	Class I, Div 1, Groups A, B, C, D T4 Class I, Zone 1 AEx ia IIC T4 Ga Class I, Zone 1 Ex ia IIC T4 Ga Class II, Zone 21 AEx ia IIIC T135°C Da	Class II, Div 1, Groups E, F, G Class I, Zone 0 AEx ia IIC T4 Ga Class I, Zone 0 Ex ia IIC T4 Ga Class II, Zone 20 AEx ia IIIC T135°C Da Tambient -40°C to 70°C				
ATEX certification		9-0 : 2012+ A11 : 2013 2; EN 60079-26 : 2007				
, II LA GGI UNGANOTI	Zone 1 Ex ia IIC T4 Ga Zone 21 Ex ia IIIC T135°C Da	Zone 0 Ex ia IIC T4 Ga Zone 20 Ex ia IIIC T135°C Da				
IEC Ex certification	Standards: IEC 60079-0 edition 6.0; IEC 60  Zone 1 Ex ia IIC T4 Ga  Zone 21 Ex ia IIIC T135°C Da	2079-11 edition 6.0; IEC 60079-26 edition 2.0  Zone 0 Ex ia IIC T4 Ga  Zone 20 Ex ia IIIC T135°C Da				

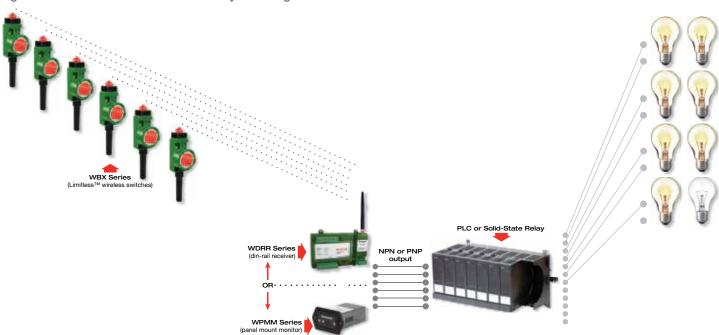
<sup>\*</sup> Actual range will vary depending upon antennas, cables, and site topography.

**Table 2. Battery Specifications\*** 

Characteristic	Technical Data (typical values @ 25 °C for batteries stored)
Honeywell battery part number	WBT7
Battery size (each cell)	AA Ø 14,5 mm x 50,5 mm L [Ø 0.57 in x 1.99 in L]
Battery type	Lithium Thionyl Chloride
Nominal capacity @ 2 mA, up to 2 V	2.4 Ah
Rated voltage	3.6 V
Max. recommended continuous current	200 mA
Max. pulse current capability	400 mA
Weight	17.6 g [0.62 oz] per cell
Lithium metal content	0.7 g per cell (approx.)
Volume	8 cc per cell
Operating temperature	-55 °C to 85 °C [-67 °F to 185 °F]
Storage temperature (recommended)	30 °C [86 °F]
Suggested alternate sources of battery cell supply	Xeno Energy (part number XL-060F) Bipower (part number ER14505H) Tadiran (part number TL-5903/S)

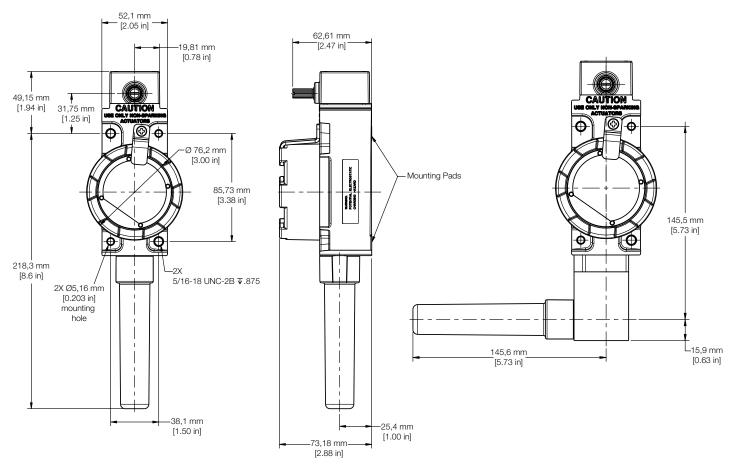
#### **EXAMPLE POINT-TO-POINT SYSTEM DIAGRAM**

Figure 1. WBX Limitless™ Point-to-Point System Diagram



#### **MOUNTING AND REFERENCE DIMENSIONS**

Figure 2. Limitless™ WBX Series Side Rotary Dimensions



Operating Head Code "A"
Straight Antenna

Operating Head Code "A" 90° Antenna

#### **MECHANICAL OPERATING SPECIFICATIONS**

for Side Rotary Actuators

Table 3. Operating Specifications (Mechanical)\*

Characteristic	Operating Head Code "A" Momentary
Pretravel	17.5° max.
Overtravel	60° min.
Differential travel	7° max.
Total travel	85° ref
Operating torque	0,452 Nm [4 in-lb] max.
Full travel torque	0,678 Nm [6 in-lb] max.

<sup>\*</sup> Operating point given in relation to lever mounting shaft

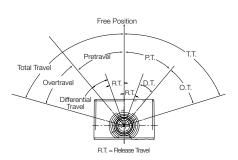
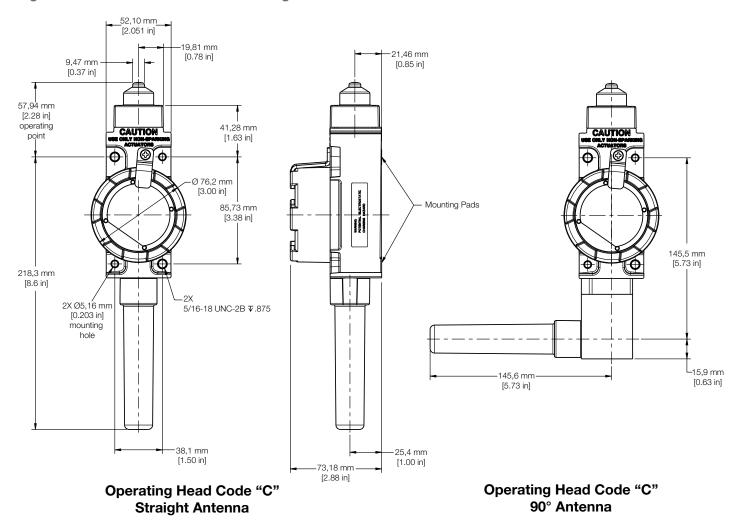


Figure 3. Limitless™ WBX Series Pin Plunger Dimensions



#### **MECHANICAL OPERATING SPECIFICATIONS**

for Pin Plunger Actuators

Table 4. Operating Specifications (Mechanical)\*

Operating Head Code "C" Top Plunger Plain
1,78 mm [0.07 in max.]
4,83 mm [0.19 in min.]
0,51 mm [0.02 in max.]
20,02 N [4.5 lb max.]
57,94 mm ± 0,51 mm [2.281 in ±0.02 in]
40 N [9 lb max.]

<sup>\*</sup> Operating point given in relation to top mounting hole

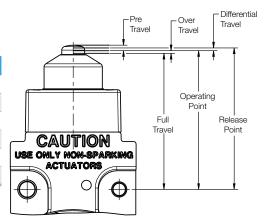
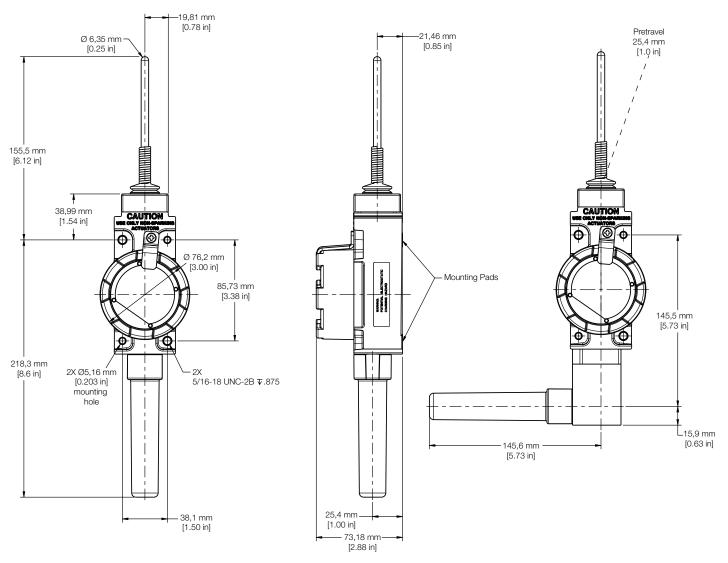


Figure 4. Limitless™ WBX Series Wobble Dimensions



Operating Head Code "J" Straight Antenna

Operating Head Code "J" 90° Antenna

#### **MECHANICAL OPERATING SPECIFICATIONS**

for Wobble Stick Actuators

Table 5. Operating Specifications (Mechanical)\*

Characteristic	Operating Head Code "J" Wobble Stick
Pretravel	25,4 mm [1.0 in] approx. radius
Operating force	283 g [10.0 oz] max.

Table 6. WBX Series Available Levers

Note: In hazardous locations, non-sparking actuators are required.



**Fixed lever** 

**LSZ51A** - front mount nylon roller **LSZ51C** - back mount nylon roller



**Short fixed lever** 

LSZ59A - front mount nylon roller LSZ59C - back mount nylon roller



Offset lever

LSZ55A - back mount nylon roller **LSZ55C** - front mount nylon roller



Adjustable lever

LSZ52A - back mount nylon roller LSZ52C - front mount nylon roller



Yoke lever

**LSZ53A** - front/back mount nylon rollers



Rubber roller lever

**LSZ51Y** - standard LSZ52Y - adjustable LSZ55Y - offset





LSZ52K



LSZ54M

Table 7. WBX Series Lever Order Guide

Catalog Listing		Material	Roller Dia. mm	Roller Width mm	Roller Mounting
	Eivad 20 1 F	1.5] inch radiu	[in]	[in]	
	LSZ51	Rollerless	n/a	n/a	n/a
	LSZ51A	Nylon	19 [0.75]	6,35 [0.25]	Front
10000 100	LSZ51A	Nylon	19 [0.75]	6,35 [0.25]	Back
675	LSZ51F	Nylon	25,4 [1.0]	12,7 [0.50]	Front
/// Ph	LSZ51G	Nylon	38,1 [1.5]	6,35 [0.25]	Front
AGLIII)	LSZ51d	Nylon	25,4 [1.0]	12,7 [0.50]	Back
	LSZ51M	Nylon	19 [0.75]	31,7 [1.25]	Back
7	LSZ51W	Nylon	. ,	12,7 [0.50]	Front
The state of the s		Nylon	19 [0.75]		Front
	LS2Z51A (sst)	-	19 [0.75]	6,35 [0.25]	
4	LS2Z51C (sst)	Nylon	19 [0.75]	6,35 [0.25]	Back
	LS2Z51E (sst)	Copper alloy	19 [0.75]	6,35 [0.25]	Front
	LS2Z51F (sst)	Copper alloy	19 [0.75]	6,35 [0.25]	Back
		38,1 [1.5] in to			-/-
(0)	LSZ52	Rollerless	n/a	n/a	n/a
	LSZ52A	Nylon	19 [0.75]	6,35 [0.25]	Back
	LSZ52C	Nylon	19 [0.75]	6,35 [0.25]	Front
d lad	LSZ52E	Nylon	19 [0.75]	33,0 [1.30]	Front
	LSZ52J	Nylon	25,4 [1.0]	12,7 [0.50]	Front
	LSZ52K	Nylon	38,1 [1.5]	6,35 [0.25]	Front
	LSZ52M	Nylon	50,8 [2.0]	6,35 [0.25]	Front
117	LSZ52N	Nylon	19 [0.75]	12,7 [0.50]	Front
11 11	LS2Z52A (sst)	Nylon	19 [0.75]	6,35 [0.25]	Front
- 1	LS2Z52C (sst)	Nylon	19 [0.75]	6,35 [0.25]	Back
	LS2Z52E (sst)	Copper alloy	19 [0.75]	6,35 [0.25]	Front
	LS2Z52F (sst)	Copper alloy	19 [0.75]	6,35 [0.25]	Back
	Yoke - 38,1	[1.5] in radius	5		
	LSZ53A	Nylon	19 [0.75]	6,35 [0.25]	Front/Back
	LSZ53E	Nylon	19 [0.75]	6,35 [0.25]	Back/Front
TIME	LSZ53M	Nylon	19 [0.75]	31,7 [1.25]	Back/Front
(C)	LSZ53S	Nylon	19 [0.75]	6,35 [0.25]	Back/Back
1	Rod				
1	LSZ54	Hub only	n/a	n/a	n/a
	LSZ54P	Plastic rod, 305 mm [12 in]	Ø6,85 [Ø 0.27]	n/a	n/a
	LSZ54W	Plastic rod, 183 mm [7.2 in]	Ø6,85 [Ø 0.27]	n/a	n/a
for					

	Catalog Listing	Material	Roller Dia. mm [in]	Roller Width mm [in]	Roller Mounting				
Offset – 38,1 [1.5] in radius									
	LSZ55	Rollerless	n/a	n/a	n/a				
EAD.	LSZ55A	Nylon	19 [0.75]	6,35 [0.25]	Back				
22	LSZ55C	Nylon	19 [0.75]	6,35 [0.25]	Front				
290	LSZ55E	Nylon	19 [0.75]	12,7 [0.50]	Front				
1	LSZ55K	Nylon	38,1 [1.5]	6,35 [0.25]	Front				
	Short fixed	- 1.3 in radi	us						
-	LSZ59A	Nylon	19 [0.75]	6,35 [0.25]	Front				
2	LSZ59C	Nylon	19 [0.75]	6,35 [0.25]	Back				
	Rubber rol	ler levers							
	LSZ51Y 38,1 [1.5] radius (standard)	Rubber	50 [2.0]	12,7 [0.5]	front				
N	LSZ55Y 38,1 [1.5] radius (offset)	Rubber	50 [2.0]	12,7 [0.5]	front				
	LSZ52Y 38,1 to 89 [1.5 to 3.5] radius (adjustable)	Rubber	50 [2.0]	12,7 [0.5]	front				

<sup>\*</sup> May require orientation of switch and lever to enable gravity to help restore switch to free position.

**Table 8. Antenna Listings/Order Code Specifications** 

Antennas can be ordered with the Limitless™ Wireless switches by inserting the **Antenna Type Code** into the part number as shown in the nomenclature. Also, switches can be ordered without antennas, by using the "00" Antenna Type Code in the part number. Antennas may also be ordered separately using the  $\boldsymbol{Part}$   $\boldsymbol{Numbers}$  below.

Table 8. Antenna Options - Country Code A

Ant. type code		Part number	Replacement antenna mount or cable	An- tenna design	Ant. gain (max.)	Con- nector/ mounting	Dimensions	Antenna material	Cable material/type	Mount mate- rial
00		WAN03RSP	-	flat	3.0 dBi	RP-SMA plug/adhe- sive mount	115 mm L x 22,1 mm W x 4,57 mm D [4.53 in L x 0.87 in W x 0.18 in D] 3 m [9.8 ft] cable	UV stable ABS	UV stable PVC/ RG-174 coax	_
00		WAN04RSP	WAMM100RSP-005 base with 1,52 m [5 ft] of cable	tilt/ swivel	5.5 dBi	RP-SMA plug/direct mount	Ø 12,7 mm x 208,28 mm L [Ø 0.50 in x 8.20 in L]	UV stable molded polyure- thane	UV stable PVC/ RG-174 coax	UV stable black ABS
00		WAN04RSP	WAMM100RSP-010 base with 3,05 m [10 ft] of cable	tilt/ swivel	5.5 dBi	RP-SMA plug/direct mount	Ø 12,7 mm x 208,28 mm L [Ø 0.50 in x 8.20 in L]	UV stable molded polyure- thane	UV stable PVC/ RG-174 coax	UV stable black ABS
00		WAN05RSP	WAMM100RSP-005 base with 1,52 m [5 ft] of cable	tilt/ swivel	9.0 dBi	RP-SMA plug/direct mount	Ø 12,7 mm x 384,05 mm L [Ø 0.50 in x 15.12 in L]	UV stable molded polyure- thane	UV stable PVC/ RG-174 coax	UV stable black ABS
00		WAN05RSP	WAMM100RSP-010 base with 3,05 m [10 ft] of cable	tilt/ swivel	9.0 dBi	RP-SMA plug/direct mount	Ø 12,7 mm x 384,05 mm L [Ø 0.50 in x 15.12 in L]	UV stable molded polyure- thane	UV stable PVC/ RG-174 coax	UV stable black ABS
00	1	WAN06RNJ	WCA200RN- PRSP-002 coax cable assembly 0,682 m [2 ft]	straight	8.0 dBi	RP-N jack/ bracket	Ø 33,5 mm x 427,9 mm L [Ø 1.32 in x 16.85 in L]	UV stable fiberglass	UV stable PVC/ RG-316 coax, UV stable Polyethyl- ene/200 Series coax	300 se- ries SST aluminum alloy
00	•	WAN06RNJ	WCA200RN- PRSP-010 coax cable assembly 3,05 m [10 ft]	straight	8.0 dBi	RP-N jack/ bracket	lØ 33,5 mm x 427,9 mm L [Ø 1.32 in x 16.85 in L]	UV stable fiberglass	UV stable PVC/ RG-316 coax, UV stable Polyethyl- ene/200 Series coax	300 se- ries SST aluminum alloy
00		WAN08RSP	-	90°	0 dBi	RP-SMA plug/direct mount	Ø 8,0 mm x 29 mm L [Ø 0.34 in x 1.14 in L]	UV stable	_	-
00	9	WAN09RSP	-	low profile mobile	3.0 dBi	RP-SMA plug/mag- netic	Ø 76,2 mm x 115 mm L [Ø 3.0 in x 4.54 in L] 4,57 m [15 ft] cable	UV stable ABS plastic	UV stable black PVC	Nickel- plated steel
00	<b>80</b>	WAN10RSP	-	straight	5.0 dBi	RP-SMA plug/mag- netic	Ø 76,2 mm x 230,1 mm L [Ø 3.0 in x 9.06 in L] 4,57 m [15 ft] cable	Nickel-plated steel	UV stable black PVC	Nickel- plated steel
00		WAN11RSP	_	low profile mobile	4.0 dBi	RP-SMA plug/thru- hole screw	Ø 39 mm x 42,4 mm L [Ø 1.54 in x 1.67 in L ]	UV stable black PVC	UV stable black PVC	Nickel- plated steel
12		WAN12RSP	_	straight	2.0 dBi	RP-SMA plug/direct mount	Ø 10 mm x 79,5 mm L [Ø 0.39 in. x 3.13 in. L]	UV stable ABS plastic	_	_

Table 9. Antenna Options - Country Code B

Ant. type code		Part number	Replacement antenna mount or cable	An- tenna design	Ant. gain (max.)	Con- nector/ mounting	Dimensions	Antenna material	Cable mate- rial/ type	Mount mate- rial
00		WAN03RSP	-	flat	3.0 dBi	RP-SMA plug/adhe- sive mount	115 mm L x 22,1 mm W x 4,57 mm D [4.53 in L x 0.87 in W x 0.18 in D] 3 m [9.8 ft] cable	UV stable ABS	UV stable PVC/ RG-174 coax	_
00		WAN04RSP	WAMM100RSP-005 base with 1,52 m [5 ft] of cable	tilt/ swivel	5.5 dBi	RP-SMA plug/direct mount	Ø 12,7 mm x 208,28 mm L [Ø 0.50 in x 8.20 in L]	UV stable molded polyure- thane	UV stable PVC/ RG-174 coax	UV stable black ABS
00		WAN04RSP	WAMM100RSP-010 base with 3,05 m [10 ft] of cable	tilt/ swivel	5.5 dBi	RP-SMA plug/direct mount	Ø 12,7 mm x 208,28 mm L [Ø 0.50 in x 8.20 in L]	UV stable molded polyure- thane	UV stable PVC/ RG-174 coax	UV stable black ABS
00		WAN08RSP	_	90°	0 dBi	RP-SMA plug/direct mount	Ø 8,0 mm x 29 mm L [Ø 0.34 in x 1.14 in L]	UV stable	_	-
00	9	WAN09RSP	_	low profile mobile	3.0 dBi	RP-SMA plug/mag- netic	Ø 76,2 mm x 115 mm L [Ø 3.0 in x 4.54 in L] 4,57 m [15 ft] cable	UV stable ABS plastic	UV stable black PVC	Nickel- plated steel
00	<b>3</b> 0	WAN10RSP	-	straight	5.0 dBi	RP-SMA plug/mag- netic	Ø 76,2 mm x 230,1 mm L [Ø 3.0 in x 9.06 in L] 4,57 m [15 ft] cable	Nickel-plated steel	UV stable black PVC	Nickel- plated steel
00		WAN11RSP	-	low profile mobile	4.0 dBi	RP-SMA plug/thru- hole screw	Ø 39 mm x 42,4 mm L [Ø 1.54 in x 1.67 in L ]	UV stable black PVC	UV stable black PVC	Nickel- plated steel
12		WAN12RSP	-	straight	2.0 dBi	RP-SMA plug/direct mount	Ø 10 mm x 79,5 mm L [Ø 0.39 in. x 3.13 in. L]	UV stable ABS plastic	_	_

#### **ACCESSORIES**

**Table 10. Replacement Parts** 

Part Number	Description
WAN12RSP	2.4 GHz, 2.0 dBi RP-SMA WLAN antenna
WAN20RAD	Replacement WBX radome

**Table 11. Cable and Coax Accessories** 

	Part Number	Description
(a) (a)	WCA200RNPRSP-002	Limitless™ Series wireless cable assembly with 200 Series cable, 2 ft length, reverse polarity N plug to reverse polarity SMA plug, use only with WAN06RNJ antenna
	WCA200RNPRSP-010	Limitless™ Series wireless cable assembly with 200 Series cable, 10 ft length, reverse polarity N plug to reverse polarity SMA plug, use only with WAN06RNJ antenna
0	WCA200RNJRSP-002	Limitless <sup>™</sup> Series wireless cable assembly with 200 Series cable, 2 ft length, reverse polarity SMA jack to reverse polarity SMA plug
0	WCA200RNJRSP-005	Limitless <sup>™</sup> Series wireless cable assembly with 200 Series cable, 5 ft length, reverse polarity SMA jack to reverse polarity SMA plug
0	WCA200RNJRSP-010	Limitless™ Series wireless cable assembly with 200 Series cable, 10 ft length, reverse polarity SMA jack to reverse polarity SMA plug
0	WCA200RNJRSP-015	Limitless™ Series wireless cable assembly with 200 Series cable, 15 ft length, reverse polarity SMA jack to reverse polarity SMA plug
0	WCA200RNJRSP-020	Limitless™ Series wireless cable assembly with 200 Series cable, 20 ft length, reverse polarity SMA jack to reverse polarity SMA plug

**Table 12. Base Accessories** 

	Part Number	Description
	WAMM100RSP-005	Magnetic antenna base with 1,52 m [5 ft] of cable
0	WAMM100RSP-010	Magnetic antenna base with 3,05 m [10 ft] of cable
4	WPB1	WPMM Wireless panel mount reciever mounting bracket
D	WPR1	WPMM panel mount retainer

**Table 13. Catalog Listings** This Honeywell datasheet supports the following Limitless™ WBX Series Catalog Listings

	Part number	Description
	WBX1A00ABA	Limitless™ WBX Series Hazardous Area Limit Switch, RP-SMA antenna jack, side rotary momentary, IEEE 802.15.4 radio specification
	WBX1A12ABA	Limitless™ WBX Series Hazardous Area Limit Switch, 2.0 dBi omni w/switch mount; straight design, side rotary momentary, IEEE 802.15.4 radio specification
	WBX1A00ABA3	Limitless™ WBX Series Hazardous Area Limit Switch, RP-SMA antenna jack, side rotary momentary to right, IEEE 802.15.4 radio specification
	WBX1A12ABA3	Limitless™ WBX Series Hazardous Area Limit Switch, 2.0 dBi omni w/switch mount; straight design, side rotary momentary to right, IEEE 802.15.4 radio specification
	WBX1A00ABA4	Limitless™ WBX Series Hazardous Area Limit Switch, RP-SMA antenna jack, side rotary momentary to left, IEEE 802.15.4 radio specification
	WBX1A12ABA4	Limitless™ WBX Series Hazardous Area Limit Switch, 2.0 dBi omni w/switch mount; straight design, side rotary momentary to left, IEEE 802.15.4 radio specification
	WBX1A00ABC	Limitless™ WBX Series Hazardous Area Limit Switch, RP-SMA antenna jack, top pin plunger, IEEE 802.15.4 radio specification
	WBX1A12ABC	Limitless™ WBX Series Hazardous Area Limit Switch, 2.0 dBi omni w/switch mount; straight design, top pin plunger, IEEE 802.15.4 radio specification
	WBX1A00ABJ7A	Limitless™ WBX Series Hazardous Area Limit Switch, RP-SMA antenna jack, wobble stick, IEEE 802.15.4 radio specification
	WBX1A12ABJ7A	Limitless™ WBX Series Hazardous Area Limit Switch, 2.0 dBi omni w/switch mount; straight design, wobble stick, IEEE 802.15.4 radio specification
	WBX1A14ABA	Limitless™ WBX Series Hazardous Area Limit Switch, 2.0 dBi omni w/switch mount; right angle design, side rotary momentary, IEEE 802.15.4 radio specification
	WBX1A14ABC	Limitless™ WBX Series Hazardous Area Limit Switch, 2.0 dBi omni w/switch mount; right angle design, pin plunger, IEEE 802.15.4 radio specification

#### **ADDITIONAL INFORMATION**

The following associated literature is available on the Honeywell web site at sensing.honeywell.com:

- Product installation and technical manual (32307000)
- Product range guide
- Product nomenclature tree
- Limitless™ product brochure
- Product application-specific information
  - Application flyer: Increase employee safety with layers of protection: Limitless<sup>™</sup> safety shower and eye wash alarm solutions
  - Application note: Limitless™ wireless hazardous location switch for grain handling
  - Application note: Limitless™ wireless hazardous location switch for valve position detection
  - White paper: Wireless switches offer unlimited benefits

#### Find out more

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office.

To learn more about Honeywell's sensing and control products, call +1-815-235-6847 or 1-800-537-6945, visit sensing.honeywell.com, or e-mail inquiries to

info.sc@honeywell.com

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### **AWARNING**

#### **PERSONAL INJURY**

**DO NOT USE** these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

### WARNING

#### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

#### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While we provide application assistance personally, through our literature and the Honeywell website, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

