## Honeywell

# Wireless **Panel-Mount Monitor** Limitless<sup>™</sup> Monitor



#### DESCRIPTION

The new Limitless<sup>™</sup> product line combines the best of MICRO SWITCH™ limit switches with the latest commercial off-theshelf wireless technology. The Wireless Panel Mount Monitor will provide a visual, audio and NPN output based on a

#### **FEATURES**

#### Wireless electrical design

- Radio (license-free and global): WPAN 802.15.4, 2.4 GHz, point-to-point
- FCC 15, IC, ACMA and ETSI approvals
- EMI immunity .
- Up to 304 m [1000 ft] line-of-sight communication range when used with a Limitless<sup>™</sup> switch (sold separately)
- Reliable, flexible, and secure wireless transmission
- 10 Vdc to 30 Vdc supply with NPN Normally Open output
- **Diagnostics** options
- Can potentially monitor up to 16 wireless switches
- Field pairing function allows for rapid configuration (add or subtract switches)

#### Mechanical design

- Panel-mount enclosure (snap-in or screw mount)
- Polycarbonate, shock resistant, tamper-proof case
- Sealed to IP67
- Multiple LED function/status indicators with audible buzzer
- Direct or remote mount antenna

signal received from a Limitless<sup>™</sup> switch. The Wireless Panel Mount Monitor will provide immediate indication of an actuator position change of the wireless limit switch.

#### BENEFITS

- Ability to reconfigure and network multiple switches, or point-to-point with personalized addresses which allows for adding, subtracting or relocating Limitless™ switches easily
- Reduced installation/maintenance costs with no wiring to Limitless<sup>™</sup> switches, conduit, strain relief, clips, connectors, connection boxes, etc.
- Snap-in panel or screw mount design allows flexibility in mounting locations
- LEDs/buzzer indicate Limitless™ switch actuation, low battery, RF signal loss, pairing function as well as diagnostic functions
- Communication security per the IEEE 802.15.4 standard (16-bit PAN (network) ID, 16-bit address and 128-bit security key)

#### POTENTIAL APPLICATIONS

- Construction/Ag machines Valve position
- Crane boom/jib/skew
- Conveyors ٠
- position
- Remote or temporary equipment Movable machinery
  - Grain diverters or flaps
- Lifts
  - Door position
    - Hose attachment verification
    - Specialty machines
  - Material
- Presses
- handling

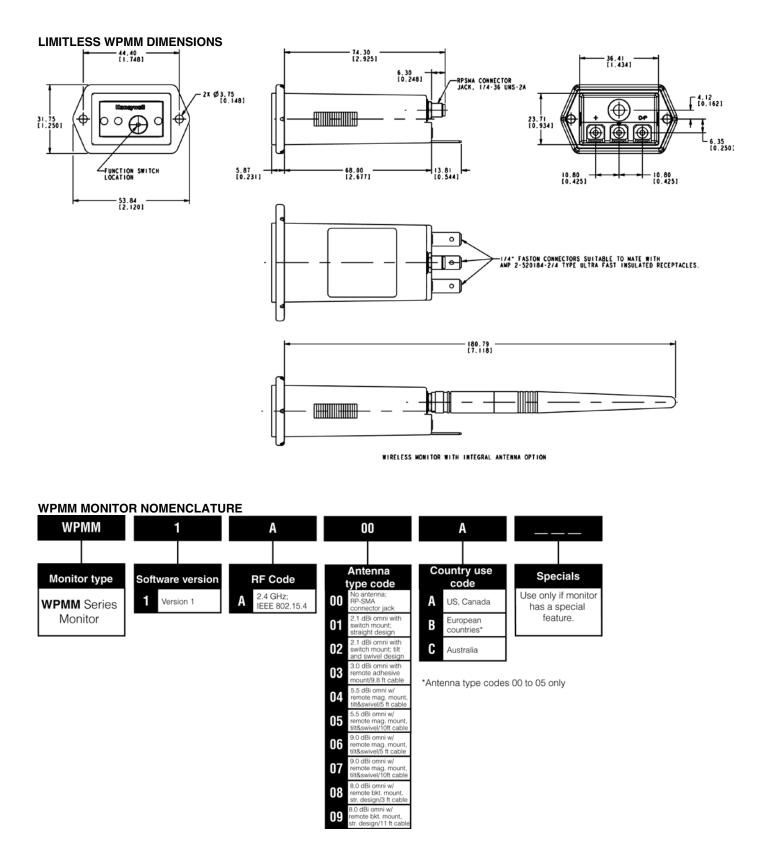
Description	Parameter	
Product type	Limitless <sup>™</sup> Panel Mount Monitor Series	
Series name	WPMM Series	
Availability	Global, license-free bands	
Housing material	LCP, VECTRA E130i	
Housing type	Snap-in panel or screw mount design	
Radio type	WPAN 802.15.4, 2.4 GHz	
Antenna type	Direct mount or remote antenna options; Omni directional	
Signal range	Nominal 304 m* for International use (Europe and Australia due to signal restrictions); Nominal 1000 ft* for use in US and Canada *clear line of sight between Limitless <sup>™</sup> switch and WPMM when using 2.1 dBi integral antenna	
Supply voltage	10 Vdc to 30 Vdc	
Supply current	750 mA	
Output type	NPN current sinking; normally open	
Load current	5 mA to 200 mA	
Leakage current	50 uA max.	
Voltage drop	1.75 Vdc max. @ max. load @ 25 °C [77 °F]	
Terminal(s)	3	
Termination	Quick connect, 0.25 in male blade	
Sealing	IP67	
Reverse polarity protection	Yes	
EMC	Latest applicable standards: EN 300 328, V1.7.1; EN 61326-1 (2006); EN 301 489-1, V1.8.1; EN 301 489-17, V2.1.1	
Shock	IEC 60068-2-27; half sine, 10 g, 6 mS, 3 axis	
Vibration	IEC 60068-2-6; 10 Hz to 500 Hz w/ 0,35 mm peak-to-peak, 58 Hz to 500 Hz- 5g	
Operating temperature	-40 °C to 85 °C [-40 °F to 185 °F]	
Agency approvals and standards	s and standards FCC 15.247 Industry Canada RSS 210 ETSI, CE mark ACMA, C-Tick mark	
UNSPSC code	20142601	
UNSPSC commodity	20142601	

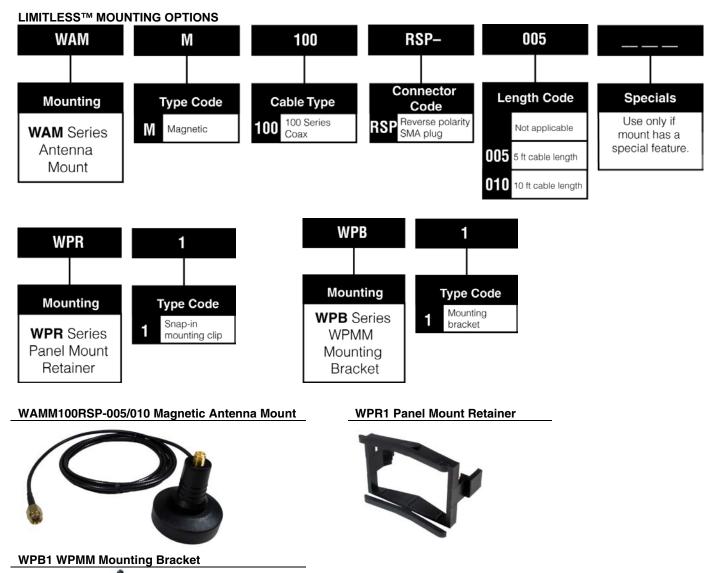
\* Actual range will vary depending on antenna, cables, and site topography.

#### STANDARD LIMITLESS™ WPMM LISTINGS

Part Number	Description		
WPMM1A02A	Limitless™ WPMM Series Monitor, 2.1 dBi omni antenna (tilt & swivel design), for use in US/Canada		
WPMM1A03A	Limitless™ WPMM Series Monitor, 3.0 dBi omni antenna with remote adhesive mounting with 9.8 ft cable, for use in US/Canada		
WPMM1A04A	Limitless <sup>™</sup> WPMM Series Monitor, 5.5 dBi omni antenna (tilt & swivel design) with remote magnetic mounting with 5 ft cable, for use in US/Canada		
WPMM1A05A	Limitless™ WPMM Series Monitor, 5.5 dBi omni antenna (tilt & swivel design) with remote magnetic mounting with 10 ft cable, for use in US/Canada		

### Wireless Limit Switches



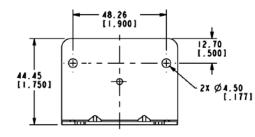




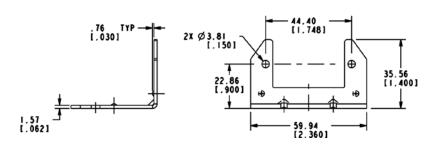
4 www.honeywell.com/sensing

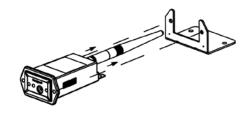
## Wireless Limit Switches

LIMITLESS<sup>™</sup> WPB BRACKET

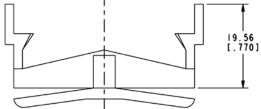


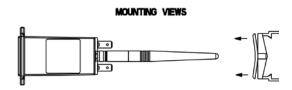


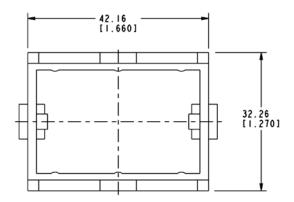


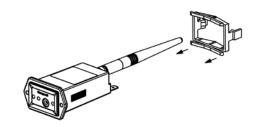




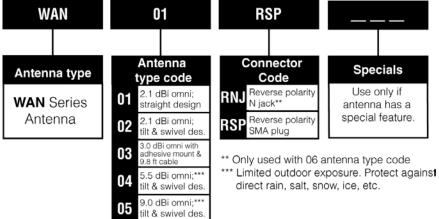












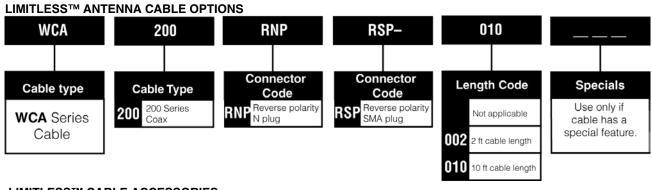
8.0 dBi omni w/ bracket, straight des 1 ft cable

06

#### LIMITLESS™ ANTENNAS

WAN01RSP	WAN02RSP	WAN05RSP with		WAN06RNJ
Straight Design		WAMM100RSP-005		Straight Design,
Direct Mount	Design, Direct Mount	Tilt and Swivel Design, Magnetic	WAN03RSP Flat Design,	Bracket Mount
Connector	Antenna	Mount Antenna	Adhesive Mount Antenna	Antenna

## Wireless Limit Switches



#### LIMITLESS™ CABLE ACCESSORIES

WCA200RNPRSP-002/010 Cable Assembly



### 🛦 WARNING

#### 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.

### A 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.

### A WARNING

Honeywell does not recommend using devices for critical control applications where there is, or may be, a single point of failure or where single points of failure may result in an unsafe condition. It is up to the end-user to weigh the risks and benefits to determine if the products are appropriate for the application based on security, safety and performance. Additionally, it is up to the end-user to ensure that the control strategy results in a safe operating condition if any crucial segment of the control solution fails.

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 web site, 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.

#### SALES AND SERVICE

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 or:

E-mail: info.sc@honeywell.com

Internet: www.honeywell.com/sensing

#### Phone and Fax:

Asia Pacific	+65 6355-2828
	+65 6445-3033 Fax
Europe	+44 (0) 1698 481481
	+44 (0) 1698 481676 Fax
Latin America	+1-305-805-8188
	+1-305-883-8257 Fax
USA/Canada	+1-800-537-6945
	+1-815-235-6847
	+1-815-235-6545 Fax

Sensing and Control Honeywell 1985 Douglas Drive North Golden Valley, MN 55422 www.honeywell.com

## Honeywell

002318-1-EN IL50 GLO Printed in USA May 2010 Copyright © 2010 Honeywell International Inc. All rights reserved.