

Wireless Sensors and Switches Line Guide



Flexibility. Value. Proven reliability. Honeywell's wireless-enabled sensors and switches combine time-proven MICRO SWITCH™ performance with the latest wireless technology. These highly flexible new performers enable reliable remote monitoring where wiring is impractical – or impossible.

Designed for demanding industries such as construction, agriculture, material handling, mining, granaries, and tough industrial manufacturing, These wireless solutions deliver rugged reliability expected from Honeywell S&C. And now it can be applied in places and ways never before possible.

The Limitless™ WGLA Series Global Limit Switch and WLS Series Heavy-Duty Limit Switch, along with the XYR6000 Wireless Position Sensor can open doors – literally – that can result in increased efficiencies and improved safety for a wide variety of switching and sensing applications for OEMs and equipment operators.

FEATURES

LIMITLESS™ Switches

WGLA Series.

Features: Reliable, flexible, and secure wireless transmission • Up to 305 m [1000 ft] communication range • Sealed to IP67 • NEMA 1, 4, 12, 13 • EN 50041 die-cast metal enclosure • Full complement of operating heads and levers • Direct or remote mount antenna options • Radio (license-free and global): WPAN 802.15.4; 2.4 GHz point-to-point • FCC 15, IC, ACMA & ETSI • EMI immunity

Benefits: Enables presence/absence detection in remote parts of applications/machinery where wiring is an issue or not feasible. Ability to reconfigure or network multiple switches, or point-to-point with personalized addresses, which allows for adding, subtracting, or relocating Limitless™ switches easily. Eliminates issues with wiring connection integrity on moving equipment. Potential applications include valve position, construction/ag machines, crane boom/jib/skew position, conveyors, remote or temporary equipment, movable machinery, lifts, grain

diverters or flaps, material handling, door position, hose attachment verification, presses, and specialty machines.

LIMITLESS™ Switches

WLS Series.

Features: Reliable, flexible, and secure wireless transmission • Up to 305 m [1000 ft] communication range • Sealed to IP67 • NEMA 1, 3, 4, 6, 6P, 12, 13 • EN 50041 die-cast metal enclosure (may be back mounted) • Over 15 side rotary actuators; pin/roller plunger, side/top rotary, cat whisker, wobble stick, side shaft eyelet pull, maintained/momentary side plunger, and cable pull operating heads • Direct or remote mount antenna options • Radio (license-free and global): WPAN 802.15.4; 2.4 GHz point-to-point • FCC 15, IC, ACMA & ETSI • EMI immunity

Benefits: Head tested in excess of 50 million cycles provides enhanced reliability. Two types of sealing (diaphragm and twin-shaft seals) provide enhanced durability. Enables presence/absence detection in remote parts of applications/

machinery where wiring is an issue or not feasible. Ability to reconfigure or network multiple switches, or point-to-point with personalized addresses, which allows for adding, subtracting, or relocating Limitless™ switches easily. Eliminates issues with wiring connection integrity on moving equipment. Potential applications include Industrial: door position, grain diverters or flaps, hose attachment verification, lifts, material handling, presses/conveyors, specialty machines, and valve position; Transportation: agricultural equipment, construction equipment, crane boom/jib/skew position, lifts, movable machinery, and specialty machinery (doors/gates).

LIMITLESS™ Monitors

WPMM Series.

Features: Reliable, flexible, and secure wireless transmission • Up to 305 m [1000 ft] communication range • Sealed to IP67 • 10 Vdc to 30 Vdc supply with NPN normally open output • Can potentially monitor up to 16 switches • Field pairing function allows for rapid configuration

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Take Action...

Both of these rugged performers rely on proven MICRO SWITCH™ technology for long life in demanding locations, while wireless capability enables their application virtually anywhere, even where previously not economically feasible or physically possible.

Limitless™ WGLA Global Limit Switches and WLS Heavy-Duty Limit Switches provide presence/absence detection. They can be reconfigured and networked in series and have ultra-low power consumption to prolong battery life (batteries are replaceable). Signal range can be up to 1000 feet (305 meters). A wide range of operating heads and levers are available, as well as monitors/receivers and accessories. The Wireless Panel Monitor receiving the switch's signal provides visual, audio and NPN output.

XYR6000 Wireless Position Sensors are based on the rugged, reliable MICRO SWITCH™ CX Series hazardous area limit switch, which has been proving itself in the marketplace for over 40 years. This reliability is now available for remote monitoring applications where wiring is not an option. The XYR6000 Position Sensor communicates with Honeywell's OneWireless™ (ISA100) network and has full UL, ATEX and IEC Ex approvals. It can be calibrated within 270 degrees to accommodate most linear and/or rotary position sensing applications. Analog output provides true position scan output in percentages or degrees.



Limitless™ Series Switches

	WGLA Series	WLS Series
Housing type	EN 50041	EN50041 and back-mounting
Housing material	powder-coated zinc die-cast	powder-coated phosphate epoxy finish, zinc die-cast
Radio	WPAN 802.15.4; 2.4 GHz	WPAN 802.15.4; 2.4 GHz
Signal range	1000 ft [305 m] in US and Canada	1000 ft [305 m] in US/Canada
Sealing	IP67; NEMA 1, 4, 12, 13	IP67; NEMA 1, 3, 4, 6, 6P, 12, 13
Actuators	side rotary, top plunger, top roller, top roller lever	over 15 side rotary actuators; pin/roller plunger, side/top rotary, cat whisker, wobble stick, side shaft eyelet pull, maintained/momentary side plunger, and cable pull operating heads
Antenna types	direct or remote mounts; omni-directional	direct or remote mounts; omni-directional



Limitless™ Series Monitors and Receivers

	WPMM Series	WDRR Series
Housing type	snap-in panel or screw mount design	din-rail or screw mount design
Housing material	LCP, VECTRA E130i	flame retardant ABS
Signal range	305 m [1000 ft] in US and Canada	305 m [1000 ft] in US and Canada
Sealing	IP67	IP20
Supply voltage	10 Vdc to 30 Vdc	10 Vdc to 28 Vdc
Supply current	750 mA	500 mA max.
Antenna types	direct or remote mounts; omni-directional	direct or remote mounts; omni-directional



XYR6000 Series

XYR6000 Wireless Position Sensor

Housing	A 380 die-cast aluminum alloy
Radio	FCC Part 15.247 subpart s "B" & "C"
Signal range	1000 ft/304 m
Sealing	IP66/67; NEMA 1, 3, 4, 6, 6P, 13
Hazardous ratings	U.S. and Canadian (cCSAus) for Division 1, Class I - Groups A, B, C, & D; Class II - Groups E, F, & G; Class III ATEX/IEC Ex - Ex d [ia] IIC T6 Gb; Ex tb IIIC T85C IP66/67 Db
Accuracy	±5 % over 250° when centered between a slip clutch

(adding or subtracting switches) • Direct or remote mount antenna options • Radio (license-free and global): WPAN 802.15.4; 2.4 GHz point-to-point • FCC 15, IC, ACMA & ETSI • EMI immunity

Benefits: Ability to reconfigure or network multiple switches, or point-to-point with personalized addresses, which allows for adding, subtracting, or relocating Limitless™ switches easily. Snap-in panel or screw-mount design allows flexibility in mounting functions. LEDs/buzzer indicates switch actuation, low battery, RF signal loss, pairing function, as well as diagnostic functions. Communication security per IEEE 802.15.4 standard (16-bit PAN (network) ID, 16-bit address, and 128-bit ASE security keys. Potential applications include valve position, construction/ag machines, crane boom/jib/skew position, conveyors, remote or temporary equipment, movable machinery, lifts, grain diverters or flaps, material handling, door position, hose attachment verification, presses, and specialty machines.

WDRR Series.

Features: Selectable NPN or PNP output • Configurable normally open or normally closed output for up to 14 Limitless™ inputs • Reliable, flexible, and secure wireless transmission • Up to 305 m [1000 ft] communication range • Field pairing function allows for rapid configuration (adding or subtracting switches) • Radio (license-free and global): WPAN 802.15.4; 2.4 GHz point-to-point • FCC 15, IC, ACMA & ETSI • EMI immunity

Benefits: Ability to reconfigure or network multiple inputs, or point-to-point with personalized addresses, which allows for adding, subtracting, or relocating Limitless™ switches easily. Eliminates issues with wire connection integrity on moving equipment. LEDs indicate change in status, low battery, RF signal

loss, pairing, and diagnostic functions. Potential applications include valve position, construction/ag machines, crane boom/jib/skew position, conveyors, remote or temporary equipment, movable machinery, lifts, grain diverters or flaps, material handling, door position, hose attachment verification, presses, and specialty machines.

XYR6000 Series XYR6000 Series Wireless Position Sensors.

Features: Wireless communication for a fast and lower-cost installation • Communicates with Honeywell's OneWireless™ (ISA100) network and WiFi devices simultaneously • Full UL, ATEX, IEC Ex approvals • IP66/67 • NEMA 1, 3, 4, 6, 6P, 13 • Calibration within 270 degrees rotation • Universal mounting • Operating temperature: -40 °C to 70 °C [-40 °F to 158 °F]

Benefits: Enhances safety by reducing the need for human site monitoring in areas that pose a safety risk. Reduces the potential for environmental incidence through the explosion-proof packaging of the sensor mechanism. Improves efficiency of scheduled maintenance by targeting valves that have degraded. Accurately monitors process parameters and possesses rapid recovery capability (Ike) to deliver know true position and stuck valve conditions. Low maintenance costs with a five-year battery life and five second update rate. Potential applications include positioners, manual process valves, eye bath stations, emergency showers, tank level, steam traps, louvers, relief vavle doors, dampers, mining conveyor applications, and grain diverters.

Warranty. 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 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.**

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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.

For more information about Sensing and Control products, visit www.honeywell.com/sensing or call +1-815-235-6847. Email inquiries to info.sc@honeywell.com

⚠ 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.

⚠ WARNING MISUSE OF DOCUMENTATION

- The information presented in this catalogue is for reference only. DO NOT USE this document as product installation information.
- 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.

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