

A Tyco International Company

IMPASSA

Self-Contained 2-Way Wireless Security System



Features That Make a Difference:

- Supports 64 wireless zones and 16 wireless keys (without using a zone slot)
- Integrated HSPA (3G) cellular communicator
- Cellular signal strength read-out to optimize placement
- 2-way wireless support
 - 1 keypad
 - 2 sirens
 - 16 wireless keys
- Real time clock update using cellular module
- Remote firmware upgrade via cellular
- Easy wireless device enrollment process
- Template programming
- Full 32-character programmable labels
- 5 programmable function keys
- Individual FAP keys
- 17 user access codes
- 500 event buffer
- Enlarged keypad buttons
- Outdoor temperature display

The IMPASSA Strategy: Detect. Defend. Defeat.

IMPASSA is the newest, next generation wireless security system from DSC. IMPASSA comes with the defense and offense needed to protect the 'king' – the home and homeowner - including:

- An integrated HSPA (3G) cellular communicator for high speed, reliable and secure alarm communications.
- The flexibility of a distributed approach that allows wireless devices to be located wherever needed for optimal protection.

As easy as setting up a chessboard, installers can now deliver a full-featured home security solution in minutes by easily enrolling a range of compatible wireless devices into the IMPASSA security system.

IMPASSA -- Checkmate.

Defensive Strategy -Integrated 3G Cellular Communicator

As any good chess player knows, looking many moves ahead is critical for a checkmate. As more homeowners transition away from traditional phone lines towards VoIP (Voice over IP) or mobile wireless phones for communication, IMPASSA

delivers an alternate communication path using the cellular network.

In addition, IMPASSA includes a more traditional phone line communicator using the Plain Old Telephone Systems (POTS).

The IMPASSA integrated communicator uses proven 3G technology. This not only allows for faster data-transmission speeds, but provides a longer lifecycle as cellular providers begin to phase out their GSM (2G) networks. Just like a mobile phone, IMPASSA displays the cellular signal strength to help determine the optimal mounting position within the home. For the homeowner's convenience, the real time clock updates the time and date via the cellular communicator.

The Flexibility of a Distributed Wireless System

Because IMPASSA is a distributed wireless system, installers have the flexibility of positioning the panel away from the premise's entry point. This allows for the installation of the





WT5500 2-way wireless wire-free keypad near the entry point so that even if the premise is compromised, the main unit (the IMPASSA panel) cannot be located by the intruder and tampered with.

For additional protection, install 2-way wireless sirens away from the IMPASSA alarm system to further camouflage and protect its location.

Compatibility

- WT5500 (P) 2-Way Wireless Wire-Free Keypad
- WT4901 2-Way Wireless Indoor Sirens or WT4911 2-Way Wireless Outdoor Sirens or a combination of both (up to 2 in total)
- WT4989 2-Way Wireless Key
- WS4920 1-Way Wireless Repeater
- All DSC 433 MHz Wireless Devices

Make your Moves Easily with IMPASSA

Once you have a good strategy in place, moving chess pieces should be quick and easy – and it is with the IMPASSA 2-Way Wireless Security System and wireless compatible devices. With only one wire needed for AC power, installers need to drill fewer holes and pull fewer wires, reducing on-site time, which leads to increased productivity and revenue. This benefits the homeowner too because it means minimal disruption to the home and less waiting around during the installation.

Using the IMPASSA 2-Way Wireless Security System also reduces the time spent enrolling compatible wireless devices. Installers confirm Electronic Serial Numbers (ESN), zone numbers and zone type through a series of user-friendly screens.

In addition, IMPASSA's template programming feature allows installers to quickly program basic functions by just entering a 4-digit code. Codes exist for pre-defined zone definitions, reporting code formats, communication call directions and DLS setup. Finally, the installer enters the monitoring station telephone number and account code, DLS access code, entry / exit delays and installer code.

Dimensions227mm	n (L) x 140mm (W) x 42mm (D)
	(8.93" x 5.51" x 1.65")
Current Draw	425 mA -750 mA
Power Supply	.16.5 VAC/20 VA @ 50/60 Hz
Aux+ Output	12.0-12.5 VDC/100 mA
Battery Backup	24 hr Backup
Operating Environment	0° to 49° C
	(32° to 120° F)
Relative Humidity	5% to 93%
Zone Count	64
Access Codes	17





Wireless Door/Window Contact **WS4945**



Features That Make a Difference:

- Replaces the WLS925L-433/ WLS935L-433
- Reliable 433 MHz technology
- Small, compact design; 30% smaller than the WLS925L-433/ WLS935L-433
- 1 pre-installed lithium battery with activation pull tab (included)
- 5/8" (16 mm) maximum magnet gap
- Smooth-back plastics to apply doubled-sided tape (included)
- Case and wall tamper (without using any mechanical springs)
- PCB antenna
- PCB mounted on the cover for easy installation
- Built-in reed switch
- Normally closed external contact input
- UL/ULC listed for North America;
 CE and RoHS compliant for
 Europe

Regardless of the application, the compactly designed WS4945 wireless door/window contact should be every installer's first choice for tough-to-fit installations.

The contact has become the new DSC standard for door/window contacts due to its streamlined profile (30% smaller than its predecessor the WLS925L-433/WLS935L) and new design that allows for double-sided tape mounting. These features combine to help get you in and out of your jobs faster than ever before.

Quicker Installations

The WS4945 features a preinstalled battery that is activated by installers through a pull tab. This helps reduce installation time as casings don't need to be opened for battery insertion. Simply draw the activation pull tab and mount the contact. To help further simplify the installation process, DSC has placed the PCB on the contact's cover. If you prefer to mount the contact using screws (recommended when using the wall tamper option), the new design does not require the removal of the PCB to do so.

Dependable & Versatile

The WS4945 is designed for dependable case- or wall-tamper detection. Depending on how the contact is purposed, it will send a signal to the alarm system if either its casing is opened or if it is forcibly removed from a wall. If the alarm system is armed when this occurs,



an alarm will be activated and the central station will be notified of the violation (if programmed to do so). The WS4945 also features an external contact input that allows a standard hardwired door to be connected to it. This is useful for installations where it is difficult to mount the magnet within the maximum allowable gap of the contact (5/8" [16 mm]).

Value Added

Significantly smaller than many door/window contacts, the WS4945 is housed within a compact casing that allows it to be used for the tightest-fitting installations. Once installed, the contact is inconspicuous and complements the décor of most homes. It is built with reliable 433 MHz technology, uses a long-life lithium battery and is compatible with all current DSC wireless receivers.

Ordering Information

3	
WS4945 Wirele	ess Door/Window Contact (NA Baud Rate)
WS4945BN Wirele Brow	ess Door/Window Contact In Plastics (NA Baud Rate)
WS4945WWirele	ess Door/Window Contact (EU Baud Rate)
WS4945BNWWirele Brow	ess Door/Window Contact n Plastics (EU Baud Rate)

Compatibility

- PowerSeries[™] Wireless Receivers
 RF5132-433/PC5132-433 all versions and RF5108-433
- MAXSYS® Wireless Receiver PC4164-433/RF4164
- PowerSeries RFK Keypads (RFK5500/RFK5501/RFK5516/RFK5508)
- Fixed-Message LCD Keypad with Integrated Wireless Receiver RF5501-433
- SCW9045/9047 Self-Contained Wireless Security System
- IMPASSA Self-Contained Wireless Security System
- ALEXOR Distributed Wireless Security System

Dimensions	
	$(75 \text{ mm} \times 31 \text{ mm} \times 22 \text{ mm})$
Battery	CR2 (3 V Lithium)
Battery Life	5-8 Years (Typical)
Operating Temperature	0 to 49 °C (32-120 °F)
Operating Humidity	5-93% RH



Wireless Passive Infrared Detector **WS4904**

Features That Make a Difference:

- Reliable 433 MHz technology
- WS4904P model version provides pet immunity up to 60 lbs (27 kg)
- Digital signal analysis for consistent detection throughout the coverage pattern
- Exceptional catch performance at elevated temperatures
- Patented Multi-Level Signal Processing (MLSP) for accurate detection of human IR energy over a broad range of temperatures
- High-traffic shutdown
- Temperature compensation
- 1 long-life lithium battery included; capable of up to 9 years of battery life
- Sensitivity adjustment to configure the detector for "normal" (high sensitivity) or "hostile" (low sensitivity) environments



Among the most technologically advanced detectors available, the WS4904 achieves superior detection and false alarm prevention through digital signal analysis. Digital information is more accurately analyzed using software and is not subject to signal degradation caused by amplification, noise, distortion or signal clipping. The detector's technology adapts to changing environmental conditions by adjusting critical detection parameters to provide improved consistency of detection over all temperature ranges. Pet owners looking to be protected from false alarms can choose the WS4904P model version, a detector that is immune from pets weighing up to 60 lbs (27 kg).

Accurate Detection

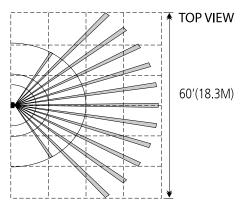
Patented Multi-Level Signal
Processing (MLSP) provides for
more accurate detection of human
IR energy over a broad range of
temperatures. It's able to maximize
catch performance while providing
protection against false alarm
sources such as radio interference,
air vents and insects.

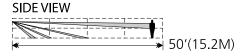
Wireless Reliability

Built with reliable 433 MHz technology, the detector features the latest low-power RF technology to effectively extend battery life. The PCB antenna design provides for more consistent performance and better coverage and sensitivity.



Coverage Pattern





Compatibility

The WS4904 is compatible with the following receivers:

- IMPASSA Self-Contained 2-Way Wireless Security System
- ALEXOR 2-Way Wireless Security System
- SCW9045/9047 Self-Contained Wireless Security System
- PowerSeries Wireless Receivers PC5132-433 / RF5132-433 / RF5108-433 / TR5164-433
- PowerSeries RFK Keypads RFK55XX-433
- MAXSYS Wireless Receivers PC4164-433 / RF4164-433
- WS4920 Wireless Repeater

Dimensions	4 ^{1/4} ″ x 2 ^{1/2} ″ x 2 ^{2/16} ″
	(108 mm x 63.5 mm x 54 mm)
Battery	CR123A (3V Lithium)
Battery Life	9 Years (Typical)
Coverage	40 ft x 40 ft (12 m x 12 m)
	Fast Setting
Operating Temperature	10° to 55°C (14° to 131°F)
Relative Humidity	5% to 93%



4-Button Wireless Key **WS4939**

Features That Make a Difference:

- Compact, attractive design
- Durable, scratch-resistant buttons
- 4 programmable function keys
- Powered by long-life lithium batteries (included)
- Full three-second delay on panic alarm to reduce false alarms
- Multifunction belt clip
- Reliable 433 MHz technology
- Optional generic rubber insert



Add wireless convenience and value to any DSC security system with the WS4939 4-button wireless key.

Utilizing our unique wireless technology and the latest production techniques, the WS4939 incorporates features and benefits into a sleek design that is compact and user- friendly. Users enjoy a sense of control over their security systems and the added confidence that comes with portable personal protection.

Committed To False Alarm Reduction

False alarm reduction has resulted in the introduction of activation delays that require users to press and hold a button for a period of time before its function is initiated. For example, to trigger the arm/disarm function you must press and hold the appropriate button for one second, and for the panic alert, three seconds.

A red LED indicator on the WS4939 flashes to indicate that a transmission has been sent to the security system. The LED indicator activates only after the necessary delays have expired.

Control

The WS4939 can be used to arm/disarm security systems from a distance, be programmed to trigger garage door openers, turn on lights, open powered gates or trigger panic alarms.

Versatile

A multifunction clip allows the wireless key to be clipped to a convenient location, whether it's on a belt or car visor. The WS4939 wireless key is built with reliable 433 MHz technology, uses long-life lithium batteries and is compatible with all current DSC wireless receivers.

For those not using the default settings, the three second delay on the panic alert can be removed. A generic rubber button insert without the standard icons is included and can easily be inserted.





Compatibility

- ALEXOR 2-Way Wireless Security System
- SCW9045 Self-Contained Wireless Security System
- PowerSeries Wireless Receivers
 PC5132-433 / RF5132-433 / RF5108-433
- PowerSeries RFK Keypads RFK55XX-433
- MAXSYS® Wireless Receivers PC4164-433 / RF4164-433
- WS4920 Wireless Repeater

Dimensions	2 1/2" x 1 1/4"x 7/16"
	(57 mm x 32 mm x13 mm)
Weight	0.5 oz (15 g)
Operating Environment	32° to 120° F (0° to 49° C)
Relative Humidity	5% to 93%



DSC Impassa HSPA Module - Data Sheet

The Impassa HSPA 3G Module from Alarm.com brings Alarm.com's secure wireless signaling, real-time notification and web-based remote monitoring and control capabilities to the DSC Impassa panel. Its digital wireless communication via HSPA enables secure alarm reporting to any central station via SIA or Contact ID, regardless of whether a phone line is installed at the system location.

- · Secure Wireless Signaling via HSPA
- No phone line required (VoIP Compatible)
- · Remotely programmable via Alarm.com's Remote Toolkit
- · Enables Alarm.com interactive monitoring and alerting for end users
- · Supports two-way voice over HSPA
- Integrated support for Alarm.com emPower™ home automation and energy management platform
- Compatible with Alarm.com Image Sensor (additional hardware required)

Features

Fast, Reliable & Secure Wireless Signaling

The Alarm.com HSPA Module for Impassa can be used as the primary means of communication (no phone line needed) or as a backup to a landline phone connection.

No Separate Power Supply Needed

The Alarm.com HSPA Module does not require its own battery or transformer. It runs on the control panel's AC power and backup battery sources and can function reliably for more than 24 hours during a power outage.

Remote Monitoring & Control via Web/Mobile

Operation of the Impassa system from the Alarm.com web and mobile interface is simple and allows system access at any time, from any location. Web features from Alarm.com include viewing system status and history, arming and disarming the system, setting up and managing user codes, and creating customized e-mail and text message notifications for any type of alarm or non-alarm activity at the property.



Expansive Coverage Footprint

Alarm.com's HSPA services are available throughout the United States on Verizon's reliable nationwide network.

Two-Way Voice over HSPA

The HSPA Module with Alarm.com's patented digital two-way voice technology gives customers additional security and peace of mind by allowing a central station operator to speak to occupants and listen-in on premise activity during alarm events directly through the control panel— even without a landline connection.

emPower™ Home Automation & Energy Management

Alarm.com's emPower™ solution, supported on the HSPA Module, offers feature-rich home automation and energy management services built on our proven, interactive platform, allowing remote control of Z-Wave devices through the web/mobile interfaces.

Innovation in Motion with Alarm.com's Image Sensor

The Alarm.com Image Sensor combines a wireless PIR (Passive Infrared) motion sensor, an integrated still camera, completely wireless communication, and Alarm.com Interactive Services to deliver better security through visual verification of alarms and increased engagement through on-demand property views. The Image Sensor is compatible with the HSPA Module when the Image Sensor daughterboard (sold separately) is connected.

Easy-to-Read Diagnostics

The Alarm.com HSPA Module diagnostic LEDs and supplementary troubleshooting menus on the panel allow installers to monitor the connection between the control panel and the module, and between the module and the HSPA cellular network. The LEDs also indicate HSPA signal strength, which is useful when choosing the best location for the HSPA Module and antenna installation.

Easy Remote Programming with the Remote Toolkit

Save valuable time and money with Alarm.com's web based Remote Toolkit. Using the Remote Toolkit, security dealers can troubleshoot and resolve many customer issues remotely with just the click of a mouse.

Functions Include:

- · Add and delete sensors
- Edit sensor type and name in panel
- · Change entry/exit delays
- Change beep settings and volumes

The Remote Toolkit does not require downloader software or a phone line connection to the control panel.



Specifications

Compatibility

Power Requirements

Cellular Network

Operating Temperature

Storage Temperature

Humidity

Dimensions

Listings

Carrier Options

Impassa panels with software versions 1.3+

3.9v, 60mA standby current without Image Sensor daughterboad (5mA PowerSave mode), 84mA standby current with Image Sensor daughterboad (10mA PowerSave mode), 1A peak current

HSPA 3G

14 to 131°F (-10 to 55°C)

-30 to 140°F (-34 to 60°C)

90% non-condensing

(H x W) 3.25 x 4.25 in. (8.23 x 10.80 cm.)

FCC Part 15, IC, PTCRB

AT&T, Rogers

