



SERENITY™ Series Full Wireless Solutions



 **CROW**



SERENITY™ Series

Content

Corporate Profile	1
Solutions and Technologies	2
1. Serenity™ Residential Two Way Wireless Alarm System	3
2. Serenity™ Wireless Devices	7
3. Serenity Connect™ Mobile Application.....	31
4. Crow Cloud™ Smart Connectivity for Serenity Connect.....	33
5. Easy Serenity™ PC Application.....	35

Corporate Profile

The Crow Group designs and manufactures **since 1980** advanced security solutions for the worldwide security and the home automation markets.

The Crow Group provides innovative and creative solutions for **residential and commercial** applications with an extensive range of smart wireless and hybrid panels and a broad portfolio of indoor and outdoor detectors, DECT-ULE and ZigBee based peripherals and devices to create **smart connected homes**.

Our products are commercialized worldwide by a dynamic network of distributors and sales offices to professional installers and central monitoring stations.

Continuous innovation at Crow is ensured by engineers dedicated to the integration of the latest technologies including on going communication challenges, interoperability and integration of automation, management systems, **wireless security products and Cloud services**.

We proudly combine creativity and expertise to create world-class products and services with added value for our customers at maximum cost effectiveness while complying with the highest standards of quality, technology, reliability as well as support and fast delivery.



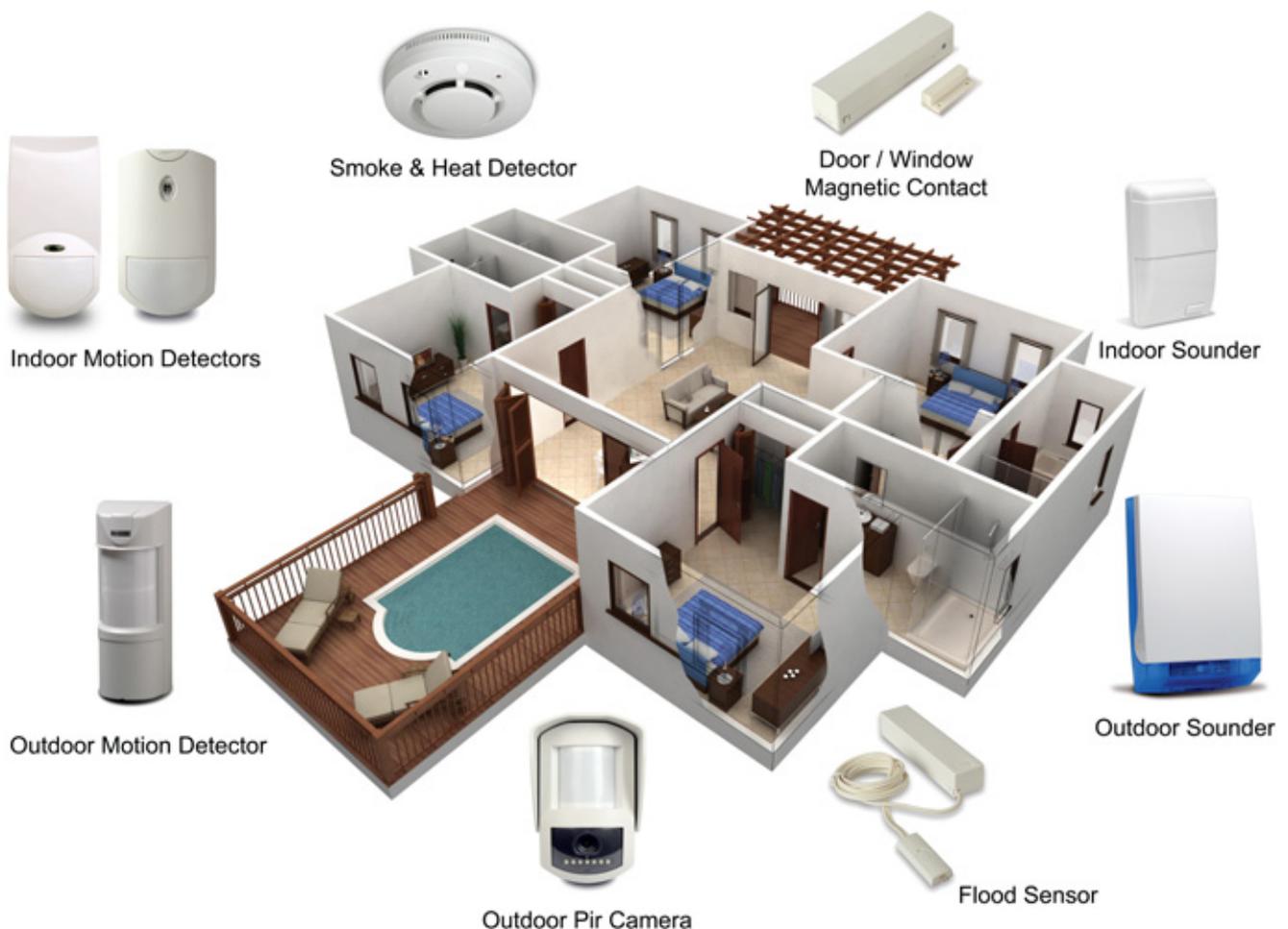
Solutions and Technologies

Crow offers new advanced home alarms systems as well as connected devices for the smart home **all controlled through Serenity Connect™ mobile app**, and welcome you to Crow's connected smart home and to Crow Cloud™.

By using latest wireless technology, combined with **Serenity Connect™** mobile app which functions as an online control panel, Crow enables each Serenity™ panel owner to keep in touch with his home and family, wherever he is.

Crow's Smart app allows to turn Serenity™ home alarm on and off via any smartphone, control lights and other electronic devices remotely, get messages and pictures when your children come home or be warned if the fire detector goes on.

Being an expert in security and control technologies allows Crow to comply with customers requirements of today and tomorrow.



1. SERENITY™

Residential Two Way Wireless Alarm System



Safety Home Personal Care

Serenity™ can be used to raise an alarm call from anywhere in the home.



Serenity Connect™

Mobile Application to monitor and control your system anywhere any time!



Security with Visual Verification

Advanced solution for alarm transmission and visual verification to CMS by TCP/IP & GSM/GPRS.



Home Automation

Serenity supports control systems such as air conditioners, lights, electric window blinds, garage door etc.



Serenity™ is an amazing alarm system to fit on your wall like a piece of art.

Simple to learn and easy to use, Serenity™ is a powerful system for any residential application via any communication path you choose. With Serenity™ comprehensive Solutions, your home is now safe, comfortable and can be remotely managed from anywhere.



With Serenity™ you can enjoy the most exciting experience in

SECURITY + SAFETY + HOME AUTOMATION

Easy to use

- Touch keypad
- RFID
- Voice guidance
- Smart phone App

All-in-one solution in compact design

- Serenity Connect™ Web based Cloud and Mobile Application
- Two way wireless system for safe communication and over-the-air configuration
- GSM /GPRS
- TCP/IP
- PSTN
- RFID Reader

Easy to install, manage and update

- Fast installation and Quick programming
- Easy Serenity™ PC remote control, monitoring and configuration

SERENITY™

Control Panel Specification



RF Network Type	FW2 Two Way Protocol
Frequency Bands (MHz)	868-869 MHz / 916-917 MHz with Frequency in-band Agility and LBT (Listen Before Talk)
Operating Range	500 meters open space
Zones Number	32 wireless zones 2 wired zones (remain 30 wireless zones)
Available Partitions	4
Installer and User Codes	1 installer code 1 super user 64 users
Control Devices	Built-in capacity keypad Two-Way Wireless LCD keypad with full programming capabilities. Two -Way Wireless Icon Keypad Wired LCD keypad (CAN BUS) Two -Way Remote Control (Rolling Code) Mobile Smart Application Serenity Connect™
Outputs	16 outputs 1 internal siren (output #1 by default) 2 available wired outputs Wireless Outputs Relays
Display	Built-in LCD Display 64 x 128 pixels
Arming Modes	Total, Stay, Latchkey, Duress, Bypass
Languages	12 languages (display and audio messages) English, French, Hebrew, German, Russian, Spanish, Portuguese, Dutch, Italian, Chinese, Greek and Turkish.
Internal Souder Output	100 ±3dBA at 1 meter
Supervision	Programmable (7 minutes by default) 60 sec for PIR-CAM and FW2-LCD Keypad
Special Functions	Zones Bypass Chime zones Walk Test Mode and RSSI signal check Events Memory (2000 logs) Local message recorder (record/playback)

COMMUNICATION

	SERENITY™ Without GSM Module	SERENITY™ With GSM Module
Capabilities	Built-in PSTN Dialer/Modem Built-in TCP/IP module	Built-in PSTN Dialer Built-in TCP/IP module GSM/GPRS Module
Data Transfer to Local Computer	USB connection (direct) TCP connection (internal network)	
Report Channels	5	9
Report Destinations	Private Phone Monitoring Station Mobile Application Serenity Connect™	
Report Format	TCP/IP Contact ID or SIA by using Receiver Software PSTN Voice Messages PSTN direct CID or SIA Email notification (if PirCam enabled)	TCP/IP Contact ID or SIA by using Receiver Software PSTN Voice Messages PSTN direct CID or SIA Email notification (if PirCam enabled) GSM Voice and DTMF GSM SMS notification and Commands GPRS Contact ID or SIA by using Receiver Software
Report Type to Private Phones	Voice Messages(pre-recorded messages) Messages can be modified locally DTMF Commands Capabilities	Voice Messages (pre-recorded messages) Messages can be modified locally DTMF Commands Capabilities SMS
Ring Detection	Yes ,Programmable	
Audio Verification	Full Duplex Two-way voice communication	
Mobile Application	Serenity Connect™ (Apple / Android / Web)	
Remote Programming	Via PC software Easy-Serenity™ reachable by PSTN and TCP/IP	

ELECTRICAL

Power Supply Type	External AC/DC Plug-In Adaptor 9V/1.3A
12V Out Voltage	12V (±1V) DC
Max Current allowed to drain from 12V -Out	100mA
Low Battery Threshold	7.1V (±0.2V) DC
Backup Battery Type	Battery Pack 7.2V/2050mAh
Time to Charge	24 hours
Internal Siren Current	Up to 150mA
Output Sirens Current	Up to 100mA
RFID Module Current	Up to 100mA

PHYSICAL PROPERTIES

Dimension	291 x 165 x 35 mm
Weight	1.40Kg with battery
Operating Temperature Range	-10° C to 55 °C
Storage Temperature Range	-20 °C to 60 °C
Humidity	90% relative humidity
Keypad Type	Built-in touch keypad Optional Wireless LCD or Icon Keypad Optional Wired Keypad (CAN BUS)

2.1 Security Detectors

FW2-Neo / FW2-Novo Motion Detectors
FW2-MAG Magnetic Door & Window Contact
FW2-GBD Glass Break Detector
FW2-PIR CAM Indoor
FW2-PIR CAM Outdoor

2.2 Safety Devices

FW2-SMKH Smoke & Heat Detector
FW2-Flood Sensor
FW2-Panic Watch

2.3 Keypads & Remote Control Units

FW2-RMT Remote Pendant
FW2-LCD Keypad with RFID
FW2-Icon Keypad with RFID

2.4 Sounders

FW2-Vesta Indoor Sounder
FW2-Neptune Outdoor Sounder





SERENITY™ Series

Full Wireless Solutions

Residential Two Way Wireless Alarm System

Security Detectors



FW2-Neo/FW2-Novo
PET Immune PIR
Motion Detector



FW2-MAG
Magnetic Door &
Window Contact



FW2-GBD
Glass Break
Detector



FW2-PIR CAM IN
Indoor PIR & Camera
Detector



FW2-PIR CAM OUT
Outdoor PIR & Camera
Detector

Sounders



FW2-Vesta
Indoor



FW2-Neptune
Outdoor



SERENITY™ Control Panel

Safety Devices



FW2-SMKH
Smoke & Heat
Detector



FW2-Flood
Flood Sensor



FW2-Panic Watch
Waterproof transmitter

Keypads & Remote Control units



FW2-LCD
LCD Graphic Keypad
with RFID



FW2-Icon
Icon Keypad
with RFID



FW2-RMT
4-Button Keyfob
Remote Control

2.1 Security Detectors

FW2-Neo / FW2-Novo

FW2-MAG

FW2-GBD

FW2-PIR CAM Indoor

FW2-PIR CAM Outdoor



FW2-Neo / FW2-Novo

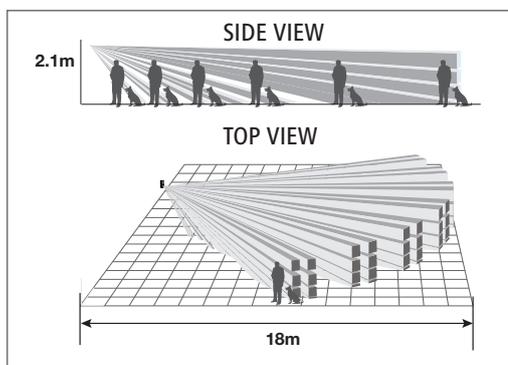
Two Way Wireless PET Immune PIR Detector

FW2-Neo and FW2-Novo are fully supervised low current Two Way Wireless PIR detectors, including the advanced Freewave2™ Two way protocol for secure and reliable system operation.

These motion detectors have a unique ID code and includes APS (Automatic Power Saving) mechanism for extending battery life.

The advanced protocol of FW2-Neo and FW2-Novo includes series of messages for full communication administration (Supervision, Tamper, Low Batt.) as well as test transmission signals (Communication, Tamper, Alarm).

Detection Pattern



SPECIFICATION

Detection Method	Quad Element PIR
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Tamper, Supervision, Low Battery
LED Indications	Green LED: PIR channel Red LED during alarm
Range in open space	500 m
Tamper Switch	Front cover removal & Back tamper
Supervision Time	7 min by default (programmable between 1 to 30 min)
Optimal installation height	1.8m to 2.4m
Current Draw	Standby ~7 A Receive mode ~29 mA Transmit mode ~38 mA
Transmit power	~ 14dBm
Power Supply	Lithium 3V battery type CR123 / Size 2/3AA
Battery Life	Up to 5 years (regular use)
Operating Temperature	-10°C to +50°C
Dimensions	123mm x 62mm x 38mm
Weight (inc. battery)	120 gr



FW2-Neo
Two Way Wireless
PET Immune PIR Detector



FW2-Novo
Two Way Wireless
PET Immune PIR Detector



FW2-MAG

Two Way Wireless Door/Window Magnetic Contact

The FW2-MAG is an advanced magnetic contact sensor with integrated RF transceiver designed to be a fully supervised low-current device. A built-in reed switch and/or an external wired input may be applied in this device.

To maximize security, an 8.2k end-of-line resistor is monitored on the external wired input.

FW2-MAG uses smart message control, which verifies that all messages are successfully transmitted, so that no intrusion event will be uninformed to the system. Each FW2-MAG has a unique factory set ID code (24bit) which by registration is set into memory of the paired Freewave2™ Transceiver, enabling more secured communication and devices to be remotely controlled from a specific transceiver.



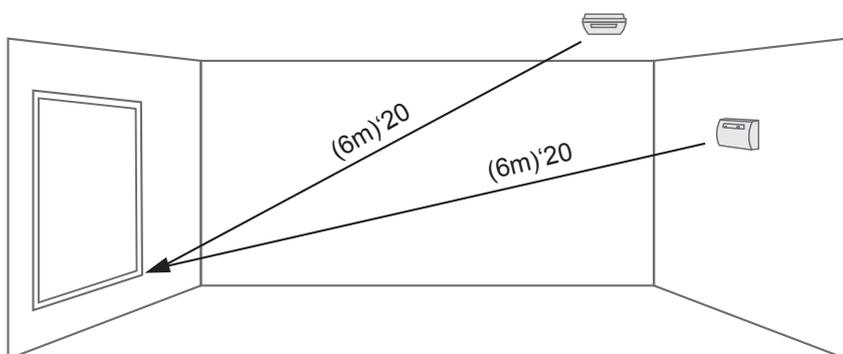
SPECIFICATION

Detection Method	Internal reed switch or External magnet device
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Tamper, Supervision, Low Battery
External Input	Up to 15m with 8.2Kohm EOL resistor
LED Indications	Illumination of the LED confirm each transmission
Range in open space	500 m
Tamper Switch	Front cover removal & Back tamper
Supervision	7 min by default (programmable between 1 to 30 min)
Current Consumptions	Standby ~3 A Receive mode ~29 mA Transmit mode ~38 mA
Transmit power	~10dBm
Power Supply	1 x CR123 Battery
Battery Life	Up to 5 years (10 activation/day)
Operating temperature	-10°C to +50°C
Dimensions	97mm x 22mm x 21mm
Weight (inc. battery)	40 gr

FW2- GBD

Two Way Wireless Glass Break Detector

- Omni – directional 360° coverage
- Maximum detection range for plate, tampered and laminated
- Low current Technology
- Sends alarm, tamper, supervision and Low battery condition alert



SPECIFICATION

Detection Method	Omni directional Electret microphone
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Tamper, Supervision, Low Battery
LED Indications	LED during alarm
Alarm Period	4 seconds
Range in open space	500 m
Coverage Area	Wide Angle 3-6m radius
Tamper Switch	Front cover removal & Back tamper
Supervision	7 min by default (programmable between 1 to 30 min)
Current Draw	Standby < 20µA Transmit mode ~35µA
RF Immunity	10V/meter, 1MHz to 1000MHz
Power Supply	1 x CR123 Battery
Battery Life	Up to 5 years (regular use)
Operating temperature	-10°C to +50°C
Housing Material	Flame retardant ABS
Dimensions	85mm x 53mm x 21mm
Weight (inc. battery)	40 gr

FW2-PIR CAM Indoor

Two Way Wireless Indoor PIR & Camera Detector

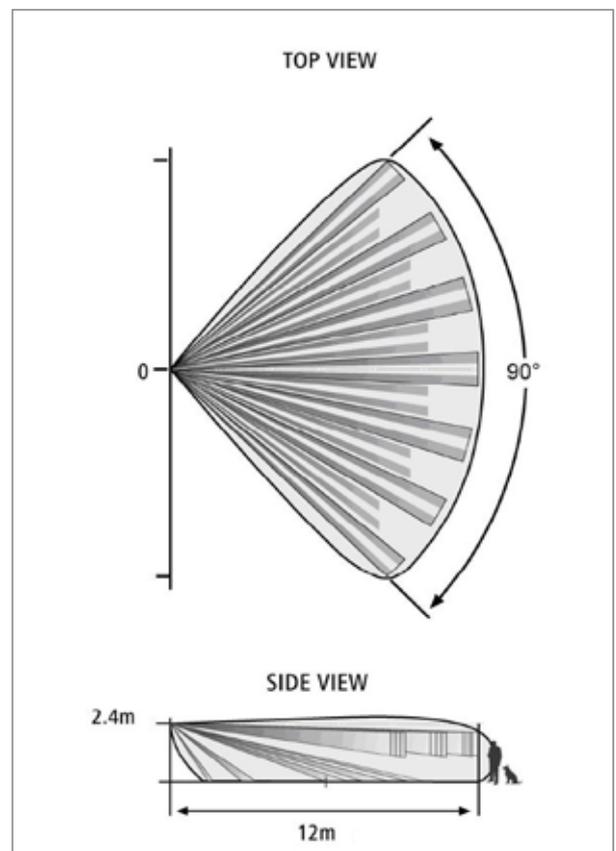
The FW2-PIR CAM Indoor is a two way wireless motion detector with a built-in CMOS high quality color camera that provides the perfect solution for visual alarm verification of your premises.

When your control panel is armed and the PIR sensor detects movement, the detector sends an alert and transmit picture to the CMS or to your mobile phone (via Serenity Connect™ application).



SPECIFICATION

Detection Method	Quad Element PIR & CMOS Camera for visual verification
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Picture(s) Verification, Tamper, Supervision, Low Bat Supervision
LED Indications	LED during alarm
Tamper Switch	Font Cover and Removal
Communication Range in open space	500m
Picture Range	12m
Camera	CMOS camera with CIF or VGA resolution
Picture Mode	≥ 16 Lux – Color Picture (take picture only) 16 to 8 Lux – B&W Picture with Gain Control ≤ 8 Lux – B&W Picture with Gain control and IR LED illumination
Current Draw	Average - 87µA Receive mode – 24mA Transmit mode – 38mA
Battery	Three 3V Lithium battery CR123
Battery life expectancy	Up to 5 years (regular use)
Low Battery	2.45V
Operating Temperature	-10°C to +50°C
Dimensions	129.5mm x 67.4mm x 52mm
Weight (incl. battery)	200gr



FW2-PIR CAM Outdoor

Two Way Wireless Outdoor PIR & Camera Detector

The FW2-PIR CAM Outdoor is a two-way wireless outdoor motion detector with a built-in CMOS high quality color camera and advanced VMD technology for reliable external visual verification.

Upon an intrusion event, or by homeowner demand, the FW2-PIR CAM send an alert and transmits a sequence of pictures to the Serenity™ control panel through TCP/IP or GPRS to the monitoring station or to your mobile phone (via Serenity Connect™ mobile app).

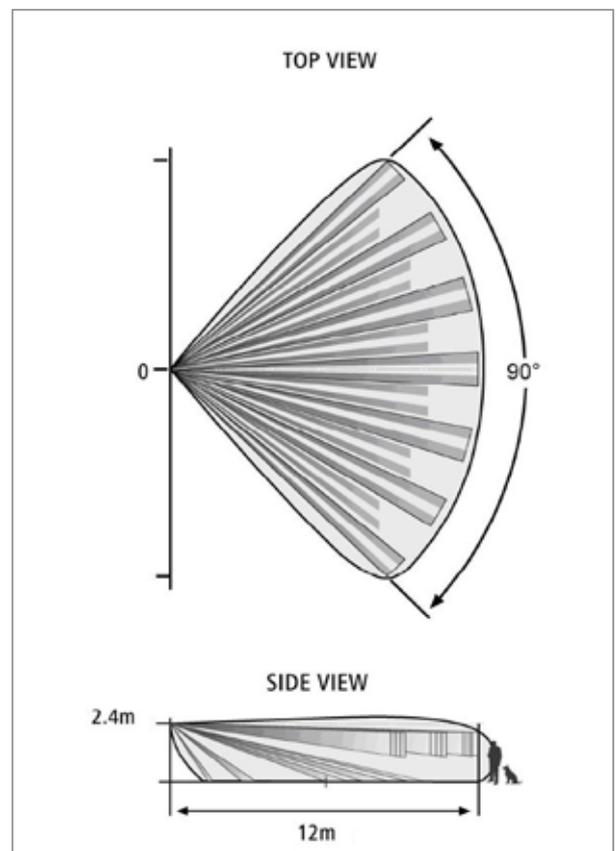
The Serenity™ will report the alarm and send you pictures before the intrusion in your premises!

The FW2-PIR CAM Outdoor provides to your home the perfect solution for outdoor surveillance.



SPECIFICATION

Detection Method	Quad Element PIR & CMOS Camera for visual verification
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Picture(s) Verification, Tamper, Supervision, Low Bat Supervision
LED Indications	LED during alarm
Tamper Switch	Font Cover and Removal
Communication Range in open space	500m
Picture Range	12m
Camera	CMOS camera with CIF or VGA resolution
Picture Mode	≥ 16 Lux – Color Picture (take picture only) 16 to 8 Lux – B&W Picture with Gain Control ≤ 8 Lux – B&W Picture with Gain control and IR LED illumination
Current Draw	Receive mode – 24mA Transmit mode – 38mA
Battery	Two 3V Lithium battery D Size
Battery life expectancy	Up to 3 years (regular use)
Low Battery	2.45V
Operating Temperature	-10°C to +50°C
Dimensions	135mm x 75mm x 70mm
Weight (incl. battery)	400gr



2.2 Safety Devices

FW2-SMKH

FW2-Flood

FW2-Panic Watch



FW2-SMKH

Two Way Wireless Smoke & Heat Detector



The FW2-SMK is a two way wireless photoelectric smoke & heat detector using low current technology.

The detector automatically compensates for long-term environmentally induced changes to maintain a constant smoke sensitivity. When the drift compensation has reached its high or low limit of adjustment, the detector will go into the trouble state

The heat detector will go into alarm when the heat signal level exceeds the heat alarm threshold and will automatically restore when the heat signal level falls below the heat alarm threshold.

SPECIFICATION

Detection Method	Photoelectric Smoke Detector
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Tamper, Supervision, Low Bat Supervision
LED Indications	LED during alarm
Tamper Switch	Font Cover and Removal
Communication Range in open space	500m
Detection Sensitivity	2.3+1.2%/ft
Alarm Sound Level	85 db at 3 m (10 feet)
Audible Warning	Built-in horn beeps ones Test mode Or Alarm
Test mode / activation	Beeper test & Alarm transmission test
EMI rejection	up to 2 GHz > 10V/m
Battery	Lithium 3V Type: xx123 Size: 2/3 AA
Battery Life	Up to 3 years
Operating Temperature	-10°C to +50°C
Dimensions	115mm x 40mm
Weight (incl. battery)	200gr

FW2-Flood

Two Way Wireless Flood Sensor

The FW2-Flood is an advanced flood sensor with integrated RF transceiver designed to be a fully supervised low-current device.

The FW2-Flood is a part of the Freewave2™ which is a supreme wireless line of devices that uses a two way RF transceiver combined with the intelligent Freewave2™ protocol.

A built-in terminal connection for an external wired sensor applies in this device.

FW2-Flood uses smart message control, which verifies that all messages are successfully transmitted.

Each FW2-Flood has a unique ID code set into the memory of the paired control panel, for more secured communication.



SPECIFICATION

Detection Method	External golden contacts pins device
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Tamper, Supervision, Low Bat Supervision
LED Indications	LED during alarm
Tamper Switch	Font Cover and Removal
Communication Range in open space	500m
Current Consumptions	Standby ~3 µA Receive mode ~29 mA Transmit mode ~38 mA
Battery	Lithium. 3V Type: CR123A Size:2/3AA
Battery Life	>5 years (10 activation per day)
Low Battery	~2.4Vdc
Transmit power	~10dBm
Tamper Switch	Front Cover Removal
Operating temperature	-10°C to +50°C
Dimensions	97mm x 22mm x 21mm
Weight (inc. battery)	40 gr



FW2-Panic Watch

Two Way Wireless Panic Device

The FW2-Panic Watch is an advanced water-resistant pendant transmitter with single-button press-and-hold activation and ergonomic design to wear on a regular basis as any wristwatch or necklace.

- Water resistant
- Supplied with wristband and necklace
- Single button activation
- Lithium battery operated
- Ideal for assisted living installations
- Can be worn in the shower or bathroom
- Necklace included



SPECIFICATION

Transmission Method	Push Button
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with Agility and LBT
Identification	Unique ID serial number – 24 bit
Event Transmission	Alarm, Tamper, Supervision, Low Bat Supervision
LED Indications	LED during transmission
Communication Range in open space	500m
Current Consumptions	Standby < 1µA Transmission < 25±3mA
Battery	Soldered CR2016
Battery Life	>5 years (1 activation per day)
Operating temperature	-10°C to +50°C
Weight (inc. battery)	20 gr

2.3 Keypads & Remote Control Units

FW2-RMT

FW2-LCD KP

FW2-Icon KP



FW2-RMT

Two Way Wireless Remote Pendant

The FW2-RMT is a two way wireless remote pendant which offers the convenience of arming / disarming your alarm system securely.

- Slim and elegant design
- 4 independent and programmable buttons
- 5 programmable functions
- Unique ID number



SPECIFICATION

Transmission Method	4 independent and programmable buttons
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHz with Agility and LBT
Identification	Unique ID serial number – 24 bit
LED Indications	Red LED during transmission and Arm Confirmation Green LED for Disarm confirmation
Range in open space	150m
Current Consumptions	Standby <1 • A Transmission ~30 mA
Battery	Lithium 3V Size CR2032
Battery life	Up to 5 year
Operating Temperature	-10°C to +50°C
Dimensions	87mm x 38mm x 12mm
Weight (incl. battery)	20gr

FW2-LCD KP

Two Way Wireless LCD Graphic Keypad with RFID

The FW2-LCD keypad is a two-way wireless keypad with a slim and elegant display and RFID.

The FW2-LCD keypad is a two-way wireless keypad providing to the user the full controls, notifications and system configuration of the Serenity™ control panel.

- Easy arm and disarm with proximity tags
- Battery operated
- RFID tag operation
- Up to 8 keypads per Serenity™ panel



SPECIFICATION

Transmission Method	Alphanumerical Keypad & RFID
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with LBT
Identification	Unique ID serial number – 24 bit
Indications	LCD Graphic Display
RFID	Built-in proximity reader
Range in open space	500m
Functions	Arm, Disarm, Zone Bypass, Panic Alarm, Chime... Full programming mode
Users	Same users as configured in Serenity™ control panel Installer mode
Battery	Powered by 3 x Lithium batteries / Size CR123
Battery Life	Up to 5 years (regular use)
Operating Temperature	-10°C to +50°C
Dimensions	170mm x 170mm x 26mm
Weight (incl. battery)	250gr

FW2-Icon KP

Two Way Wireless Icon Keypad with RFID

The FW2-Icon Keypad is a two-way wireless keypad. It includes built-in proximity RFID tag reader and numerical keypad.

Totally standalone, the FW2-Icon keypad can be wall mounted or can be used as a portable unit.

- Easy and user-friendly control of the security system
- Integrated panic button
- Attractive, ergonomic design for handheld use or wall mounting



SPECIFICATION

Transmission Method	Numerical Keypad & RFID
Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with LBT
Identification	Unique ID serial number – 24 bit
Indications	LED Icons
RFID	Built-in proximity reader
Range in open space	500m
Functions	Arm, Disarm, Zone Bypass, Panic Alarm, Chime... Local Programming mode (users/tags)
Current Consumptions	Average: 10µA Standby: 4µA Transmission ~28 mA
Battery	Powered by 3 x Lithium batteries / Size CR123
Battery Life	Up to 5 years (regular use)
Operating Temperature	-10°C to +50°C
Dimensions	152mm x 80mm x 28mm
Weight (incl. battery)	200gr

2.4 Sounders

FW2-Vesta

FW2-Neptune



FW2-Vesta

Two Way Wireless Indoor Sounder

The FW2-Vesta is the ideal two way wireless indoor sounder for your premises particularly if outdoor sounders are prohibited or if extra intrusion alert is required.

Fully standalone, this sounder is cable free installation and do not require any AC power.

The sounder's two-way communication maintains continual supervised communication with the control panel.



SPECIFICATION

Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with LBT
Identification	Unique ID serial number – 24 bit
Indications	LED during transmission and Activation
Range in open space	500m
Sound Pressure Level	More than 100dB
Siren Tone	Yelp
Frequency Range	2700 ±500 Hz
Current consumption	Standby: 110uA ±10uA@ Battery operation Alarm: Average: 400mA @ Battery operation. Max: 600mA peak@ Battery operation.
Power Supply current limitation	Up to 1A
Maximum Power	Average :3W
Siren Alarm Period	2 min/15 min (According the status of Dipswitch#4)
Low Battery Level	2.8V
Low Battery Indication	LED Flash @ Arm/Disarm (According the status of Dipswitch 2&3)
Arm/Disarm Indication	LED Flash : Arm-1, Disarm-3 LED Flash with Beeps : Arm-1, Disarm-3 (According the status of Dipswitch 2&3)
Supervision	Sync signal every 1 min.
Tamper Switch	Normally Closed. After power up the Tamper will activate only after the second opening and then Activate the Piezo for 2 min or till reset by the C.P.
Power Supply Voltage	1 x Lithium battery 3.6V / Size D
Battery Life	> 4 Years (Based on 2 min Piezo operation/month)
Material	External Box: ABS. (2mm thick).
Operating temperature	-10°C to +50°C
Dimensions	155mm x 100mm x 48mm
Weight (Without Battery)	1 Kg

FW2-Neptune

Wireless Ultra Slim Outdoor Sounder

The FW2-Neptune is a wireless outdoor sounder combining high performance reliability, fast cable free installation and elegant design.

The FW2-Neptune is fully supervised, provides visual and audio notifications of intrusions, fire alarms, low battery voltage, and communication interferences.

The slim design of the FW2-Neptune makes it discreet but highly effective.



SPECIFICATION

Data Protocol	Freewave2™ Two Way Protocol
Modulation Type	GFSK
Frequency Band	868-869MHz / 916-917MHZ with LBT
Identification	Unique ID serial number – 24 bit
Range in open space	500m
Sound Pressure Level	105dB
Siren Tone	Yelp
Frequency Range	2700 ± 500 Hz
Indications	Flash LED during transmission (Arm/Disarm) and Activation
Flash Light	Power LED (90 Lumens)
Current consumption	Standby: 110uA ±10uA@ Battery operation 20mA±2mA@12V DC operation Alarm: 950mA @ Battery operation Max: 1.8A peak@ Battery operation Average: 200mA @ 12V DC operation Max: 1.2A peak @ 12V DC operation
Power Supply current limitation	Up to 1.8A
Siren Alarm Period	2 min/15 min (programmable)
Arm/Disarm Indication	LED Flash : Arm-1 Disarm-3 LED Flash with Beeps : Arm-1 Disarm-3
Supervision	Sync signal every 1 min
Tamper Switch	Normally Closed
Power Supply Voltage	9V±15V DC or Battery 3.6V /14Ah Lithium or both.
Battery Life	> 4Years (Based on 2 min Piezo operation/month)
Low Battery Level	2.8V
Low Battery Indication	LED Flash @ Arm/Disarm
Material	External Box: P.C. (3mm thick).
Case Protection Level	IP 43 - Plastic PC with UV protection. Conformal coated circuit board
Operating temperature range	-30°C to +70°C
Dimensions	310mm x 205mm x 75mm
Weight (Without Battery)	1.2 Kg

A close-up photograph of a woman with dark, wavy hair, smiling warmly as she looks at a purple smartphone held in her hands. She is wearing a light-colored, short-sleeved top. The background is a soft-focus green, suggesting an outdoor setting with trees or foliage.

3. Serenity Connect™ Mobile Application

Stay connected from anywhere at all times

Thanks to smartphones and tablets, you are now connected to your home or office from anywhere at all times.

Serenity Connect™ is Crow's Smartphone app (also available via web browser) which enables every Serenity™ panel owner to monitor and control his alarm, safety and home automation devices remotely as well as view on demand or on alert images taken with the two way wireless Crow's PIRCAM detectors.

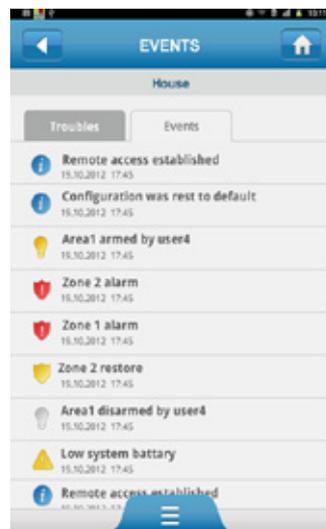
The Serenity Connect™ mobile application is your home security companion. You can enjoy the latest exiting new capabilities of your Serenity™ control panel.

With Serenity Connect™ you can remotely control your alarm systems, arm or disarm the Serenity™ receive push notifications in case of a suspected intrusion, receive email notifications in the event of an alarm as well as benefit from visual verification and self-monitoring to feel totally in control at all times.

- Easy to use
- Monitor and control multiple locations with one login
- Control your home
- Control Alarm status, Peripherals, Outputs and Home Automation devices
- Image Verification
- Receive alarm images and retrieve them from server
- Take instant color images
- Retrieve last 2000 events logs



Security



Safety



Home Automation



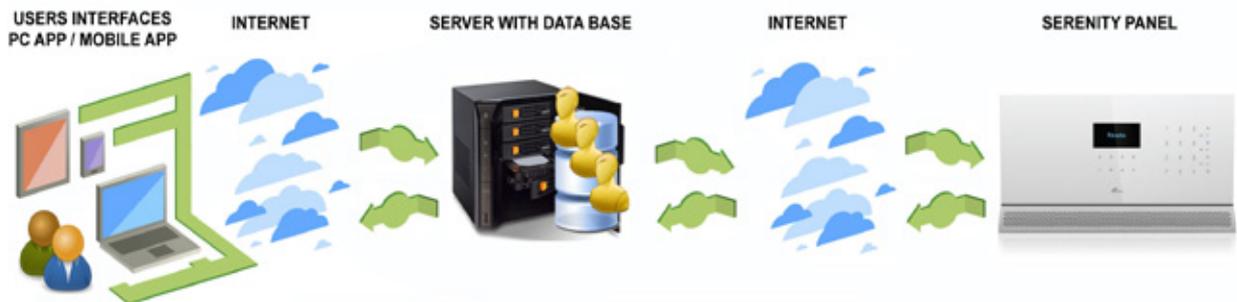
4. Crow Cloud™

Smart connectivity
for Serenity Connect™



Experience ultimate peace of mind

Whether using a PC, a tablet or a smartphone, we use cloud services every day. Crow Cloud™ help you to manage your security system and home automation. You can enjoy the user friendly Serenity Connect™ App to pilot your Serenity™ Alarm and Home Automation panel.



- No software to install and maintain, simply access Serenity™ from any internet connection
- Unique diagnostic feature to monitor your system's instant notifications if communication is lost
- Automatic notification of alarms and events (movement, intrusion, smoke, flood...)
- Automatic software updates providing users with the latest available features
- Scalable storage allowing to buy the optimal package you need
- Smart visual verification of all of your connected panels from a single user login
- Control or program blinds, lights and any other electrical appliances
- Personal dedicated online storage with access wherever you are via your PC or Smartphone via Serenity Connect™ or web interface
- Serenity Connect™ provides secure access to the Crow Cloud™
- Available on iPhone/Android/Windows app.

Serenity™ control panel supports TCP/IP and GPRS communication to the Crow Cloud™.

5. Easy Serenity™
PC Application



Easy Serenity™ is a powerful application for managing the Serenity™ control panel and its connected devices remotely wherever you are.

It enables to easily create users, learn wireless devices, manage outputs, configure communication paths, elaborate scenes, create events, trigger actions, make schedules and more.

Easy Serenity™ PC App communicates with Serenity™ via TCP/IP, GPRS or USB and allow to launch the Quick Programming setup for an easy step-by-step Serenity™ programming.

Monitoring:

- Check your control panel status and its connected devices
- Retrieve the last 2000 events stored in your panel

Control:

- Arm/Disarm your system
- Bypass Zones
- Activate Outputs and Home Automation peripherals
- Take instant pictures from connected wireless PIR CAM

Configuration:

- Quick Programming setup for technician
- Create and manage users, remote, proximity tags, outputs ...
- Create and configure wireless devices
- Manage communication features and alarm reports





HEADQUARTERS:

CROW ELECTRONIC ENGINEERING LTD.

12 Kineret St.
Airport City, 70100 Israel
Tel. +972 3 9726000
Fax. +972 3 9726001
sales@crow.co.il
support@crow.co.il
www.thecrowgroup.com

INTERNATIONAL OFFICES:

CROW LATIN AMERICA USA INC.

7200 NW 19 st.
Suite 307
Miami FI 33126, USA
Tel. +305 513 4001
Fax. +305 513 4005
rejane@crowlatinamerica.com
www.crowlatinamerica.com