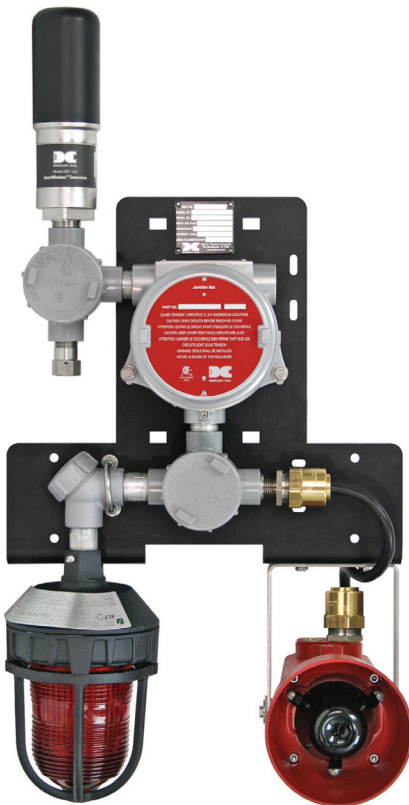




## SW-AV1-DV2

SmartWireless® Alarm Station



### Description

Detcon SmartWireless® audio-visual alarm stations are easily and economically deployable in both permanent and temporary installations. These devices feature a battery powered audio visual alarm station designed as a wireless cordless system component. They are self-certified for Class 1; Division 2, Groups B, C, D hazardous areas. Power is provided by a Detcon designed smart battery pack eliminating the requirement for power or signal cables (line power option available).

The standard rechargeable battery packs are capable of delivering enough energy for 4 hours of continuous operation in a full alarm condition or 4 months (no alarm condition). The standard rechargeable battery pack continuously reports its charge level and estimated operating time before recharge or replacement is required. An optional solar charging panel can be used to extend operating time and maintain full battery charge levels for virtually any application.

An optional disposable "D" cell battery pack is capable of delivering 9 hours of continuous operation in a full alarm condition or 8 months (no alarm condition).

Alarm level 1 is used to turn on an alarm strobe and alarm level 2 is used to turn on an audible warning device. Alarm relay options include adjustable set points and latching/non-latching relays. Alarm level 2 can be

configured for acknowledge/silence via operator interface at the SmartWireless CXT Controller.

The SmartWireless® alarm stations use Detcon's proprietary "Self Healing Mesh" technology which operates at 2.4 GHZ and conforms to non licensed radio frequency appliance usage around the world.

Wireless network integrity and security is accomplished using direct sequence spread spectrum DSSS programming topology.

Wireless applications can be as simple as a single field device communicating with a host display or any number of field devices forming a network of subscribers. Each device in the network is assigned its unique device identification or a UID.

Every device in the network can act as a router and repeater for all other devices in the network. This means that subscribers can "hop" through neighboring devices to communicate with each other thereby widening network access points.

This unique and innovative technology is designed to create a robust network that automatically routes around congestion and line-of-sight obstacles while improving throughput as subscriber device density increases.



# SW-AV1-DV2

SmartWireless® Alarm Station

## Features

Wireless-Cordless®
Line Power Option Available
Configurable with Audible & Visual
Two Strobes, or Two Audibles
4-6 Hours Continuous Operation in Full Alarm
Class I, Div II, Groups B, C, D

## Alarm Station Specifications

Input/Output	2.4GHz DSSS radio transmission
Electrical Classification	Class I; Div 2; Groups B, C, D
Dimensions	29.5"H x 15"W x 13"D; 750mmH x 381mmW x 330mmD
Weight	25 lbs.; 11.33 kg
Warranty	1 year

## Visual Alarm Specifications

Output	Intense light; flashing standard, configurable to steady burn
Lamp type	LED array
Flash rate	60 flashes per minute
Lamp life	60,000 hours
Lens colors	Amber, blue, clear, green, and red

## Audible Alarm Specifications

Output	Long Flare: 115dB(A) ± 3dB(A) (tone dependent) Short Flare: 108dB(A) ± 3dB(A) (tone dependent)
Tones	27 User Selectable Tones Available

## Applications

Oil and Gas Drilling Rigs
Oil and Gas Production Sites
Wastewater Treatment Plants
Food and Beverage Processing
Pulp and Paper Mills
Refining and Petrochemical

## Electrical Specifications

Power Input	6-30 vdc and/or Rechargeable battery pack or Internal "D" size disposable battery pack
Power Consumption	20mW (Low Power Mode) 100mW (Typical) 9.72W with visual alarm 18.84W with audible and visual alarm
Performance	Transmit Power Output: 18dBm

RF	Outdoor RF Line of Sight (with standard antenna): 1 Mile Interface Data Rate: 9,600bps Throughput Data Rate: 19,200bps RF Data Rate: 250,000bps Transceiver Sensitivity: -102dBm Frequency: 2.40-2.48GHz RF Channels: 16, each 5Mz Wide Output Power: 100mW (20.5dBm) EIRP Spread Spectrum: DSSS (Direct Sequence Spread Spectrum) Modulation: 0-QPSK Supported Network Topologies: Mesh, Point-to-Point
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Antenna	0 db 1" Whip with Screw on Radome Antenna Guard
I/O Protection	Over-voltage, Miswiring, EMI/RFI Immunity

## Environmental Specifications

Operating Temperature	-20°C to +60°C; -4°F to +140°F
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# SW-AV1-DV2

SmartWireless® Alarm Station

## Battery Specifications

**Smart Rechargeable Battery:** 4 months (no alarm condition); 4 hours (full alarm) (-20°C to +60°C; -4°F to +140°F discharge temperature; -30°C intermittent).

**Disposable "D" Cell Battery Pack:** 8 months (no alarm condition) 9 hours (full alarm) (-55°C to +85°C; -67°F to +185°F discharge temperature).

## Accessory Options

Tripod for Mounting  
Mini Tripod for Mounting  
7db Gain Antenna  
Solar Charging Panel

Specifications subject to change without notice

## Order Guide

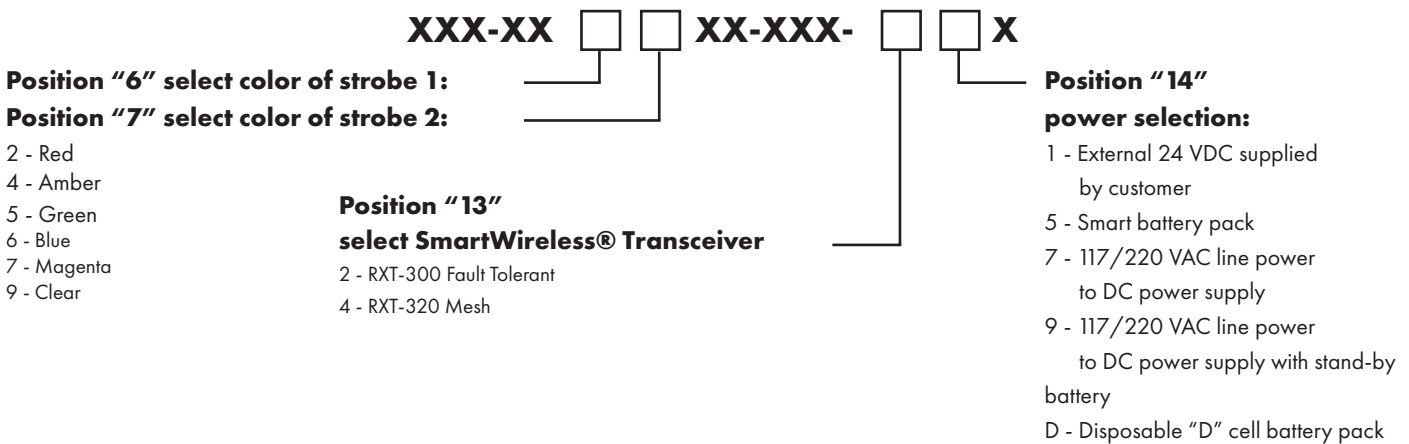
### Part Number

977-1U\_00W-1P2-\_\_0  
977-2U\_\_0W-002-\_\_0  
977-00000W-1P2-\_\_0

### Part Number

Model SW-AV1-DV2 Alarm Station (1 horn, 1 strobe)  
Model SW-V2-DV2 Alarm Station (2 strobes)  
Model SW-A2-DV2 Alarm Station (2 horns)

See legend below to complete the part number.





**TELEDYNE DETCON**  
Everywhereyoulook™



**TELEDYNE**  
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Everywhereyoulook™

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