



*Kingfisher Company, inc.*

## Industrial Radio Alarm Control System IRAC-S



**Large Enclosure  
(Outdoor Enclosure Shown)  
(Made in the U.S.A.)**



**Small Enclosure  
(Outdoor Enclosure Shown)  
(Made in the U.S.A.)**



### Features:

- Radio Transmitter (High or Low Band)
- Modular Panel
- Four Input Class B Zone Modules (Expandable 20 or 52 Zones)
- Two Input Class A Zone Modules (Expandable 10 or 26 Zones)
- 4 Auxiliary Relay Modules
- Walk Test Module
- NEMA 3R Rain-Proof Cabinet or NEMA 1 Indoor Available
- Inputs can be configure non-latching and/or non-audible
- Additional 10 amps of Synchronized NAC power with AUX power supply option

### **STAR** TECHNOLOGY

- Frequency and Call Box numbers are programmable by laptop computer.
- Programmable test time.
- Software defined transmitter, no crystals.

### Description:

The IRAC-S, Industrial Radio Alarm Control System, is a completely modular, self-contained conventional Fire Alarm Control System. The IRAC-S is a heavy duty panel capable of operating in a wide range of temperatures and designed for detecting the operation of any approved signal initiating device, indicating the area of the alarm condition by annunciator LEDs, and operates all alarm and auxiliary devices.

The IRAC-S is furnished in a NEMA 3R rainproof enclosure or a NEMA 1 indoor enclosure. The IRAC-S has the maximum expansion of 20 (Class A) or 48 (Class B) zones, depending on the enclosure and options that are selected.

In addition, the modular IRAC-S Panel has the optional capability of automatic radio reporting for alarms, supervisory, and trouble conditions with test status reporting for use with a compatible receiving unit.

## Specifications:

<b>Construction:</b>	NEMA 1R Indoor Cabinet with lock NEMA 3R Outdoor Cabinet with lock.
<b>Temperature:</b>	-40°F to +140°F(-40°C to +60°C)
<b>Power:</b>	85 - 120 VAC line voltage 24 Volt DC Back-Up Battery Power Supply
<b>Radio Trans.:</b>	72-76 MHz and 132-174 MHz
<b>Weight:</b>	Small Enclosure; 42 lbs. Large Enclosure: 75 lbs
<b>Dimensions:</b>	Small Enclosure NEMA 1R      20" H x 16" W x 6.6" D Large Enclosure NEMA 1R      42" H x 16" W x 6.6" D Small Enclosure NEMA 3R      26" H x 20" W x 6.6" D Large Enclosure NEMA 3R      42" H x 16" W x 6.6" D
<b>IRAC-S NAC Output:</b>	Maximum 1.3A
<b>Zone Alarm Out (O.C.)</b>	Maximum 500mA (For use with annunciators, or individual use etc.)
<b>Trouble/Alarm Relay Contact Rating:</b>	Maximum 30VDC @ 500mA
<b>Aux NAC Power Supply Output:</b>	Class 2 Rated power limited outputs. 24VDC voltage regulated power limited outputs. 10 amp max total alarm current. 2.5A max current per output. Two auxiliary outputs rate at 1 amp each (1 amp continuous, 1 amp AC disconnect Programmable supervised indicating circuit outputs: Four (4) Class B, Style W, Y or Four (4) Class A Style Z, or Two (2) Class A, Style Z and Two (2) Class B, Style W, Y. Thermal and short Circuit protection with auto reset.

## System Capability and Approvals:

IRAC-S Panels can be installed; as a basic fire alarm panel, a fire suppression panel, or as a radio alarm panel in an existing or new Radio Fire Alarm Reporting System using Kingfisher Company, inc. compatible Radio Base Receiving Stations.

For additional information on adding IRAC-S Panels to your existing Kingfisher Company, inc. Radio Fire Alarm Reporting System, please consult the factory.

## Optional Radio Fire Alarm Reporting Feature:

The IRAC-S Panel with its modular design can be easily upgraded from its fire alarm configuration to a radio fire reporting system within a matter of minutes. Simply add a transmitting antenna, coaxial cable, and two modular plug-in boards consisting of a modular CPU board and transmitter board, for one-way reporting. The IRAC-S Panel with its capability of automatic radio reporting for alarms, supervisory, and trouble conditions is now ready for use with a compatible receiving unit.

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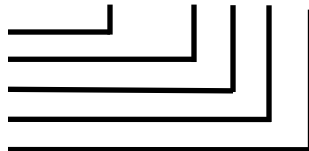
## ORDERING INFORMATION

KCi Part #	Model #	Description
99103-###A-XX	XXXX	IRAC-S Main Subplate—Choose Low or High Band, Class A, Up to 10 Zones, NEMA 1 or NEMA 3R
99103-###B-XX	XXXX	IRAC-S Main Subplate—Choose Low or High Band, Class B, Up to 20 Zones, NEMA 1 or NEMA 3R
99104-###A-XX	XXXX	IRAC-S Main Subplate—Choose Low or High Band, Class A, Up to 26 Zones, NEMA 1 or NEMA 3R
99104-###B-XX	XXXX	IRAC-S Main Subplate—Choose Low or High Band, Class B, Up to 52 Zones, NEMA 1 or NEMA 3R
66103-HB	XXXX	Transmitter Assembly Module—High Band
66103-LB	XXXX	Transmitter Assembly Module—Low Band
66119	XXXX	Power Supply Assembly Module
91117	XXXX	Expansion Zone Module—2 Zones, Class A or Class B, Includes 66110 Zone Motherboard
91119	XXXX	Expansion Zone Module—4 Zones, Class B, Includes 66110 Zone Motherboard
66170	ARCM	Auxiliary Relay Control Board— Four Relay, Requires One Module Spot
66824	ARBM	Auxiliary Relay with Bypass Switch Circuit Board
66160	WTM	Walk Test Board. Allow testing of system by one technician
91955		Door Tamper Switch Accessory
74002	CA203A	Enclosure, NEMA 3R, Small, with 211 Lock and Key
74102	CA201R	Enclosure, NEMA 1R, Small, with 211 Lock and Key
74003	CA523R	Enclosure, NEMA 3R, Large, with 211 Lock and Key
74103	CA521R	Enclosure, NEMA 1R, Large, with 211 Lock and Key
91199	XXXX	NAC10A Subplate
91104-HB		Retrofit Kit, IRAC-S, High Band—Includes Main Subplate, Transmitter (66103-HB), Alarm Control Board, and Power Supply (66119)
91104-LB		Retrofit Kit, IRAC-S, Low Band—Includes Main Subplate, Transmitter (66103-LB), Alarm Control Board, and Power Supply (66119)
99103-DTS		Data Specification Sheet

### Main Subplate Ordering Information:

99103 = Small Enclosure  
 99104 = Large Enclosure  
 H = High Band, L = Low Band  
 Quantity of Zones= 2 digits  
 A = Class A, B = Class B  
 Enclosure: NEMA 1 or NEMA 3R

**99103-H08A-1**



### Example:

**99103-L20B-3R**



NEMA 3R Enclosure  
 “B” for Class B  
 “20” for 20 Zones  
 “L” for Low Band  
 “99103” for Small Enclosure

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**Spare Parts:**

- See 99103-TEC for a list of spare parts such as fuses or individual boards and modules.

**Installations:**

- All installations shall comply with the Kingfisher Antenna Installation manual part # 75092

**NAC10A:**

- See 81197-DTS for information on ordering a standalone NAC10A

Kingfisher Company, inc., products must be used within their published specifications and must be PROPERLY specified, applied, installed, operated, maintained and operationally tested in accordance with their installation instructions at the time of installation and at least twice a year or more often and in accordance with local, state and federal codes, regulations and laws. Specification, application, installation, operation, maintenance and testing must be performed by qualified personnel for proper operation in accordance with all of the latest National Fire Protection Association (NFPA), Underwriters' Laboratories (UL), National Electrical Code (NEC), Occupational Safety and Health Administration (OSHA), local, state, county, province, district, federal and other applicable building and fire standards, guidelines, regulations, laws and codes including, but not limited to, all appendices and amendments and the requirements of the local authority having jurisdiction (AHJ).

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Kingfisher Company, inc., standard terms and conditions

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