

**900 MHz
Wireless Switch Follower/Voltage Input
Transceiver
(with On-Board 10-Amp Relays)**

The SF900C Series Remote Control/Switch Followers/Voltage Input transceivers are a two-way system designed to provide a quick and cost effective solution for a variety of wireless switching applications. Each unit has multiple (4 or 8) inputs connected to a transmitter and 4/8 outputs connected to a receiver. Designed to work in either pairs or one transmitter to several receivers, the output relays at the *receive* end of one unit will “follow” the input at the transmitter.

The inputs are opto-isolated and may be operated by an applied voltage that can be supplied by a power source from 5 to 24 Volts AC or DC through a switch contact, relay, sensor, PLC output, etc.

These products utilize spread spectrum technology and are resistant to interference and multipath fading. All inputs and outputs are independently isolated from each other and from the power supply ground.



Features

- 4-Input and 8-Input Models
- Long Range: Up to 3-miles
- Voltage/Dry Contact Inputs
- Two-Way Operation
- Multiple Receivers Can Be Used With Single Transmitter
- Spread Spectrum Technology
- Can Send “Acknowledgments” Back to Transmitter
- 12-36 Volt DC or AC Operation
- NEMA 4X Enclosure Option
- 120/240VAC Power Input Option
- Antenna Included
- FCC Certified
- Made in USA

Typical Applications

- Pump Control
- Motor Control
- Solenoid Control
- Lighting Control
- Access Control
- PLC Activations
- HVAC Control
- Conveyor Control

**Ordering Information
Transmitters (Base Units)**

<i>Model No.</i>	<i>Product Description</i>	<i>Channels/ Buttons</i>	<i>Range</i>	<i>Response Time</i>
SF900C4-B-B	Switch Follower/Voltage Input Transmitter	4	3-miles	180 ms
SF900C4-J-B	Switch Follower/Voltage Input Transmitter	4	½-Mile	58 ms
SF900C8-B-B	Switch Follower/Voltage Input Transmitter	8	3-miles	180 ms
SF900C8-J-B	Switch Follower/Voltage Input Transmitter	8	½-Mile	58 ms
Outdoor Units				
SF900C4-B-B-OPT14	Switch Follower/Voltage Input Transmitter, NEMA 4X Enclosure	4	3-miles	180 ms
SF900C4-J-B-OPT14	Switch Follower/Voltage Input Transmitter, NEMA 4X Enclosure	4	½-Mile	58 ms
SF900C8-B-B-OPT14	Switch Follower/Voltage Input Transmitter, NEMA 4X Enclosure	8	3-miles	180 ms
SF900C8-J-B-OPT14	Switch Follower/Voltage Input Transmitter, NEMA 4X Enclosure	8	½-Mile	58 ms
Suffix -PS to any OPT14 Model	120/240VAC Input			

Specifications subject to change without notice or obligation.

Receivers

Model No.	Product Description	Channels/ Buttons	Range	Response Time
SF900C4-B-R	Switch Follower Receiver	4	3-miles	180 ms
SF900C4-J-R	Switch Follower Receiver	4	½-Mile	58 ms
SF900C8-B-R	Switch Follower Receiver	8	3-miles	180 ms
SF900C8-J-R	Switch Follower Receiver	8	½-Mile	58 ms
Outdoor Units				
SF900C4-B-B-OPT14	Switch Follower/Voltage Input Receiver, NEMA 4X Enclosure	4	3-miles	180 ms
SF900C4-J-B-OPT14	Switch Follower/Voltage Input Receiver, NEMA 4X Enclosure	4	½-Mile	58 ms
SF900C8-B-B-OPT14	Switch Follower/Voltage Input Receiver, NEMA 4X Enclosure	8	3-miles	180 ms
SF900C8-J-B-OPT14	Switch Follower/Voltage Input Receiver, NEMA 4X Enclosure	8	½-Mile	58 ms
Suffix -PS to any OPT14 Model	120/240VAC Input			

Related Optional Products

Model	Description	Volts	Current
610442-SAT	AC Power Adapter, 120VAC Input	12 V _{DC}	500 mA
610347	AC Power Adapter, 120VAC Input	24 V _{DC}	800 mA
610300	AC Power Transformer, 120VAC Input	24 V _{AC}	20 VA
269006	AC Power Line Contactor, SPST, 30A, 24VAC coil	240VAC	30A

Optional Antenna Bulkhead Extension Cables

Model	Description	Length
600279-8	RPSMA Male to Female	8 Inches
600279-L100E-24	LMR-100 or Equiv.	24 Inches
600279-10F-L200	LMR-200 or Equiv.	10-Ft
600279-15F-L200	LMR-200 or Equiv.	15-Ft
600279-20F-L200	LMR-200 or Equiv.	20-Ft
600279-25F-L200	LMR-200 or Equiv.	25-Ft
Other lengths available		

Electrical Characteristics

Sym	Parameter	Min	Typ	Max	Unit
	Operating Voltage Range	10	12	36	Volts
	Operating Current, Receive Mode		45	56	mA
	Operating Current, Transmit Mode		212	225	mA
	Input Resistance		4.7K		Ohms
	Signal Input Voltage	5		28	Volts AC or DC
	Output Relay Contact Ratings @120V			10	Amps
f	Frequency Range	902		928	MHz
Z _{out}	Antenna Input Impedance		50		Ohms
T _{op}	Operating Temperature	-20		+60	C

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SF900C Voltage Input Transceivers

LEARN PROCEDURE

STANDARD TWO WAY APPLICATION: To pair a transmitter and receiver, place both units in the learn mode by pushing their respective learn buttons. The learn lights will flash. The second push of the learn button on the receiver (SF900Cn-B-R) will trigger the learning process. Once completed, the learn lights will turn Off. The receiver will have learned and adopted the code and frequency of the transmitter.

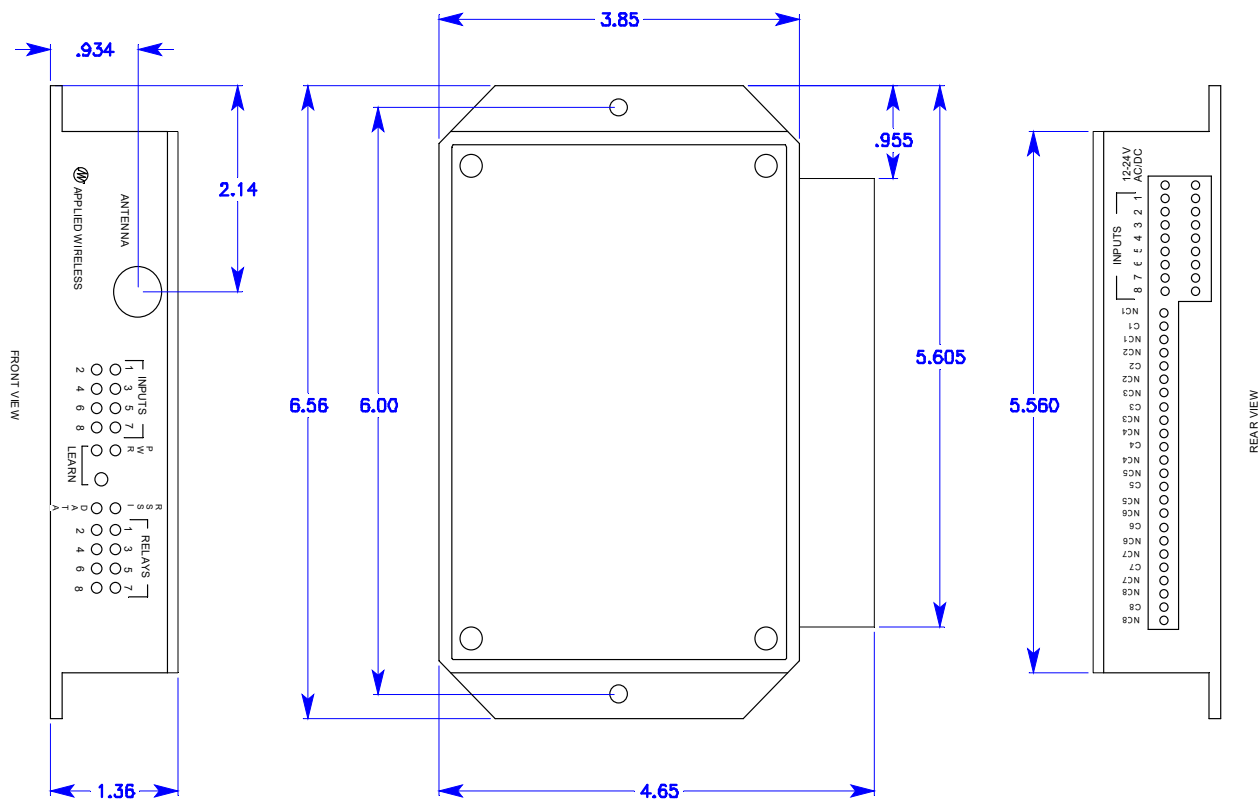
More SF900C receivers can be added to the above system one at a time by using the same transmitter. However, the enclosure covers will have to be removed from the additional SF900Cn-B-R receivers and the ACK jumper will have to be moved to the NO ACK position to disable acknowledgements. When a signal is received from a transmitter, only one receiver must reply with an acknowledgment to avoid collisions.



SF900C LEARN Button & LEARN Light

Package Dimensions

Material: ABS



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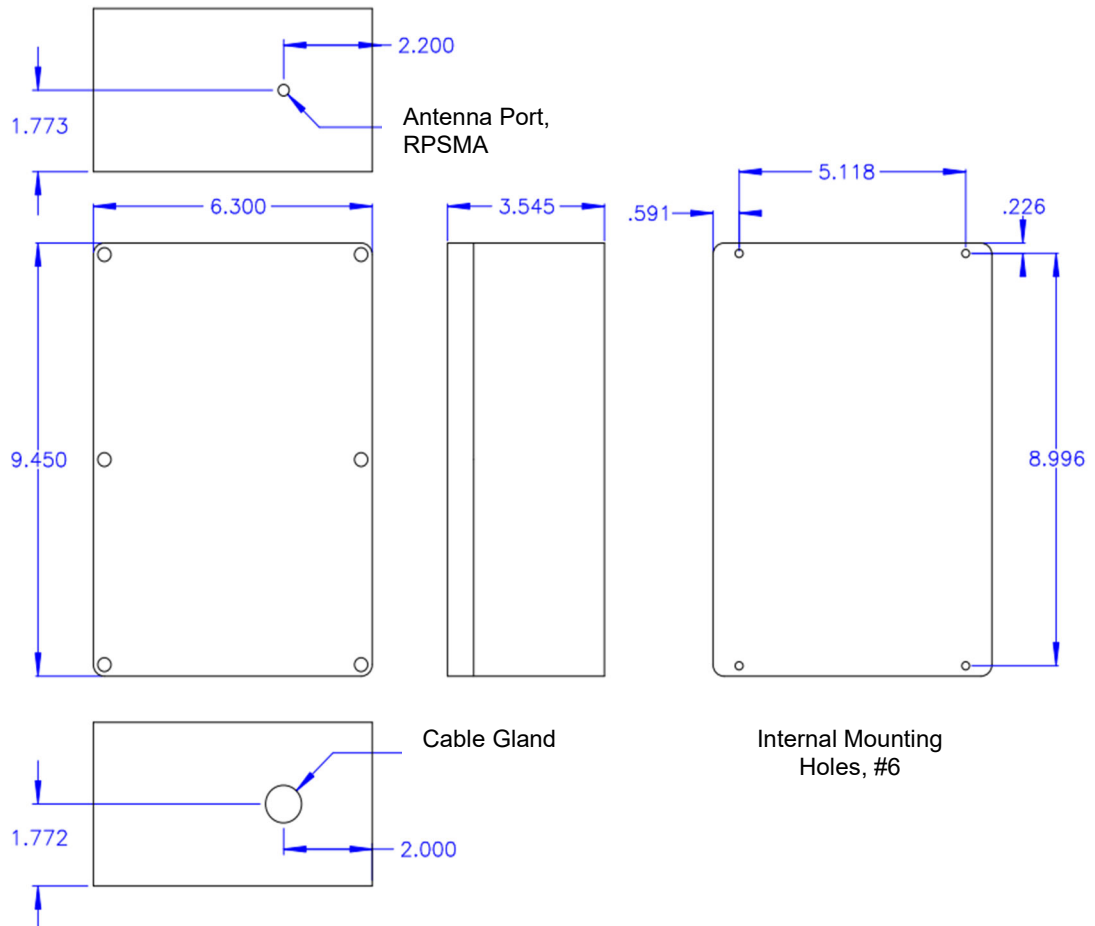
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SF900C Voltage Input Transceivers

Package Dimensions- Outdoor Enclosure -OPT14

Material: Polycarbonate

Rating: IP65



FCC ID: QY4-618

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

INSTRUCTION TO THE USER

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.

Changes or modifications not expressly approved by Applied Wireless could void the user's authority to operate the equipment.

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