

RFR-1

UHF Receiver



Visonic Ltd

Specification Sheet

1. INTRODUCTION

The RFR-1 is a general purpose, small-size super-regenerative receiver module, designed specifically for digital data transfer on UHF radio channels. Its main application is as an RF interface unit in security systems which use Visonic Ltd. UHF transmitters to communicate digital codes and reports. In these systems, the receiver data output is usually applied to a decoder or directly to a microprocessor unit.

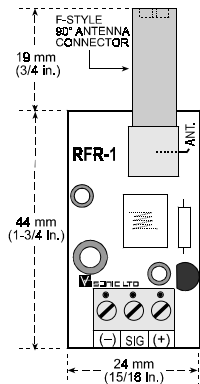


Figure 1. The RFR-1

The receiver features a serial data output with CMOS levels. The standard model has a screw-type terminal block for power supply input and digital signal output, and a wire antenna extends from the PCB. Versatility is greatly enhanced by the availability of DE3081

RFR-1-XX-YY-ZZZ-VV

PCB CONNECTOR*:

Unspecified: Screw terminals
P0 - Pin header, straight
P9 - Pin header, 90°
SB - Top-entry receptacle
SB - Bottom entry receptacle
SB - Side entry receptacle

ANTENNA CONNECTOR:

Unspecified: wire antenna
A0 - F-Style, 75Ω receptacle, straight
A9 - F-Style, 75Ω receptacle, 90°
AR - F-Style, 75Ω receptacle, 90° right angle mount

FREQUENCY:

315 - 315.0 MHz; 404 - 403.92 MHz
418 - 418.0 MHz; 433 - 433.92 MHz

SUPPLY VOLTAGE

05 - 5V; 12 - 12V

*All PCB-mounted terminals - receptacles and headers - are 4-position, single-row, board-to-board connectors with 2.54 mm (0.100") pitch and 0.64 mm (0.25") square pins.

Figure 2. Ordering Options

additional RFR-1 models with various types of board-to-board connectors and two antenna receptacle versions (Fig. 2 and 3).

2. SPECIFICATIONS

Receiver Type : single channel, UHF super regenerative receiver.

Data Rate : Up to 1 kbps NRZ

Data Output Levels: 0V (LOW) and 3.5 V (HIGH)

Supply Voltage: 12VDC ± 10% or 5 VDC ± 5%

Current Consumption: 5 mA @ 12VDC 2 mA @ 5VDC

Operating Temperature: 0°C to 49°C (32°F to 120°F)

Dimension: 44 × 24 mm (1-3/4 × 15/16 in)

Compliance with Standards: Complies with FCC part 15 , ETS300-220 requirements, and RSS-210 of Industry and Science Canada. 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 undesirable operation.

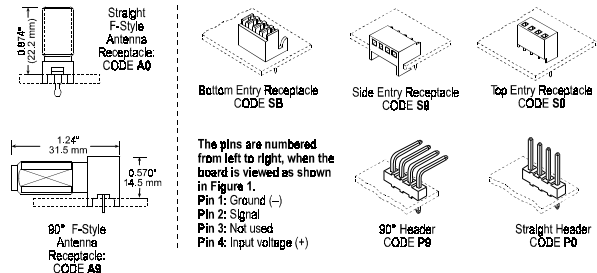


Figure 3. Connector Types

WARRANTY

Visonic Ltd. and/or its subsidiaries and its affiliates ("the Manufacturer") warrants its products hereinafter referred to as "the Product" or "Products" to be in conformance with its own plans and specifications and to be free of defects in materials and workmanship under normal use and service for a period of twelve months from the date of shipment by the Manufacturer. The Manufacturer's obligations shall be limited within the warranty period, at its option, to repair or replace the product or any part thereof. The Manufacturer shall not be responsible for dismantling and/or reinstallation charges. To exercise the warranty the product must be returned to the Manufacturer freight prepaid and insured.

This warranty does not apply in the following cases: improper installation, misuse, failure to follow installation and operating instructions, alteration, abuse, accident or tampering, and repair by anyone other than the Manufacturer.

This warranty is exclusive and expressly in lieu of all other warranties, obligations or liabilities, whether written, oral, express or implied, including any warranty of merchantability or fitness for a particular purpose, or otherwise. In no case shall the Manufacturer be liable to anyone for any consequential or incidental damages for breach of this warranty or any other warranties whatsoever, as aforesaid.

This warranty shall not be modified, varied or extended, and the Manufacturer does not authorize any person to act on its behalf in the modification, variation or extension of this warranty. This warranty shall apply to the Product only. All products, accessories or attachments of others used in conjunction with the Product, including batteries, shall be covered solely by their own warranty, if any. The Manufacturer shall not be liable for any damage or loss whatsoever, whether directly, indirectly, incidentally, consequentially or otherwise, caused by the malfunction of the Product due to products, accessories, or attachments of others, including batteries, used in conjunction with the Products.

The Manufacturer does not represent that its Product may not be compromised and/or circumvented, or that the Product will prevent any death, personal and/or bodily injury and/or damage to property resulting from burglary, robbery, fire or otherwise, or that the Product will in all cases provide adequate warning or protection. User understands that a properly installed and maintained alarm may only reduce the risk of events such as burglary, robbery, and fire without warning, but it is not insurance or a guarantee that such will not occur or that there will be no death, personal damage and/or damage to property as a result.

The Manufacturer shall have no liability for any death, personal and/or bodily injury and/or damage to property or other loss whether direct, indirect, incidental, consequential or otherwise, based on a claim that the Product failed to function.

However, if the Manufacturer is held liable, whether directly or indirectly, for any loss or damage arising under this limited warranty or otherwise, regardless of cause or origin, the Manufacturer's maximum liability shall not in any case exceed the purchase price of the Product, which shall be fixed as liquidated damages and not as a penalty, and shall be the complete and exclusive remedy against the Manufacturer.

Warning: The user should follow the installation and operation instructions and among other things test the Product and the whole system at least once a week. For various reasons, including, but not limited to, changes in environmental conditions, electric or electronic disruptions and tampering, the Product may not perform as expected. The user is advised to take all necessary precautions for his /her safety and the protection of his/her property.

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