

RF Receiver ASK - 433 MHz

Sunrom
Part#
1428

Crystal Stable, Low cost, Made in India, Reliable, Easy to use. Works with any ASK RF transmitter working at 433 MHz, Standard Footprint and Pin out. This is an ASK Hybrid 433Mhz RF receiver module and is ideal for short-range wireless control applications where cost & reliable operation is a primary concern.

User's Manual

Doc Version:
1
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A quality product, proudly made in India by

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<http://www.sunrom.com/m/1428>

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Introduction

The receiver module requires no external RF components except for the antenna. The super-regenerative design exhibits exceptional sensitivity at a very low cost.

Many of our remote control and serial data product uses an RF receiver of ASK/OOK type and we used to import from china of different makes. But we face many problems with them in terms consistent quality and availability. So we decided to make it in India for our products as well as sell it to our customers who wants reliable operation and good range from their transmitters.

Features

- Crystal Stability
- 433.92 MHz Operation
- 5V & 3.3V operating voltage
- Low power consumption
- Easy to mount
- Standard Pin out
- Simple Antenna connection - 17cm

Specifications

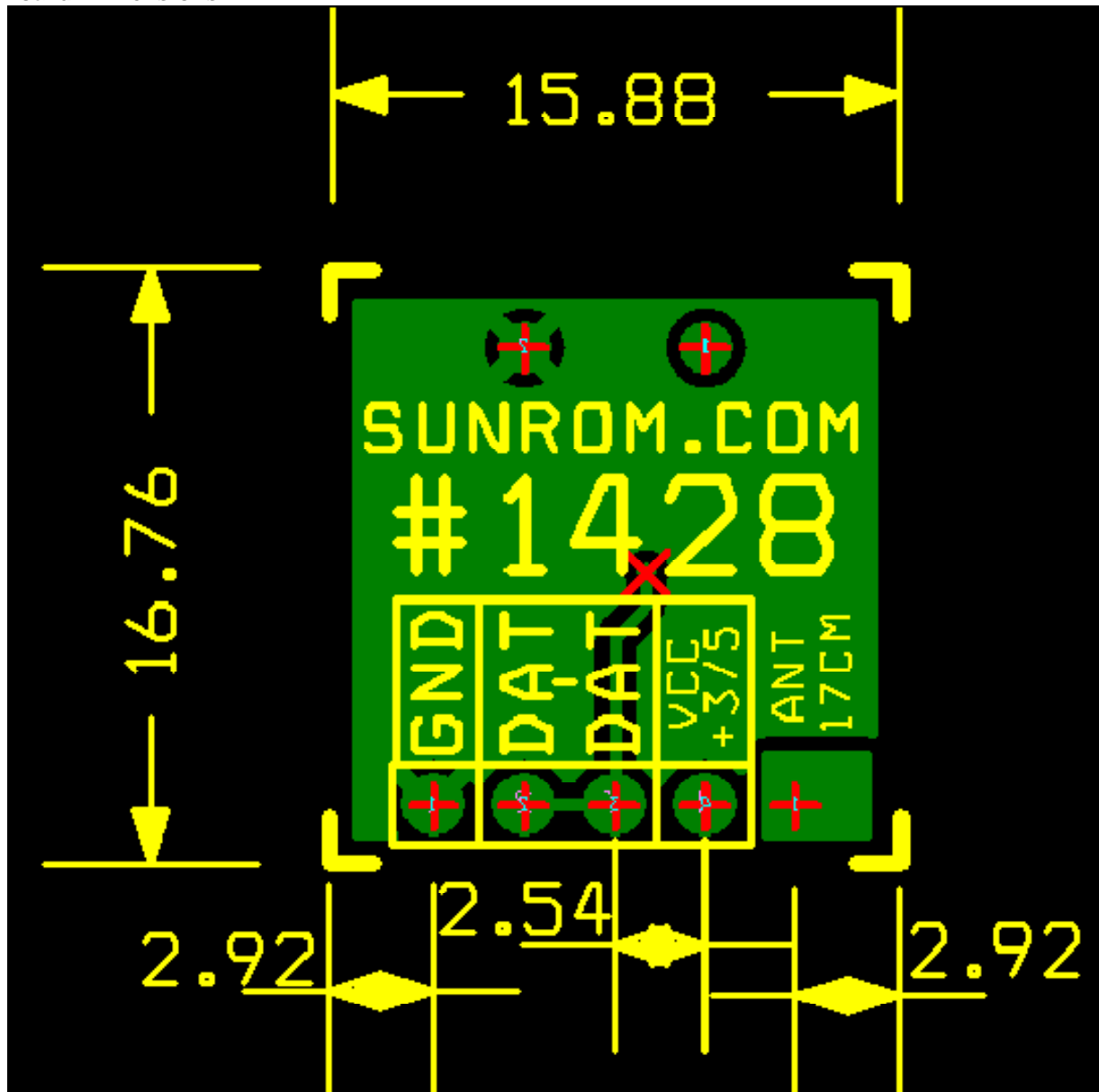
Parameter	Value
Working Voltage	3.3V to 5V DC regulated power supply
Current Consumption	4 mA
Frequency of Operation	433.92 MHz
I Frequency	1 MHz
RF Bit rate	1 kbps

Module Pin Details

Pin	Details
GND	Common Ground
DATA DATA	Data output pins, Both pins are connected, since that is the standard pin out. Can directly go to microcontrollers or decoders like HT12D, ST12, ST14, ST3777, ST3778. It's not recommended to use any external pull up resistors as it might interfere with working on module.
VCC	+3.3V / +5V Regulated DC supply
ANT	Antenna - 17cm length wire required for operation

Product Dimensions

Board Dimensions in mm



Note

Not for Serial data: This device will **not** support direct UART communication when connected to PC or microcontrollers as there is a lot of noise always available on these frequencies and it's an analog type technology. If you are looking for Serial Communication see <http://www.sunrom.com/m/1418> instead of this product. We will not be providing any support for serial communications as it's not possible to do so with this product. For remote control applications please use this module with Encoder and Decoder ICs like ST3778, ST3777, ST12, ST14 or HT12E/HT12D. These ICs implement packet communication which extracts data from noise and ignores the faulty packet. Same is not possible with UART type communication.

Why this module is useful in remote control and not for serial data communication? In remote control, once key is pressed data is sent in packet format many times per second. At receive side, the decoder IC will recognize which packet has noise and which packet is clean to take and ignore the remaining packets till new fresh packets are received. Same error checking and packet formatting is not possible with serial data. That is why it's ok for remote control and not for serial data transfer. If you try to use for serial data you will get all sort of junk characters.

Support

Sunrom Electronics offers **free technical support** (www.sunrom.com/contact) for customers, until the end of the product's lifetime, so if something goes wrong, we're ready and willing to help!

Technical Support is available by email only and scope is limited to problem faced during use of the use of product and does not cover end user programming and hardware troubleshooting.

Each product passes through strict quality checks before it reaches you. So if something is not working out right, the first thing to doubt is the connections or programming of your hardware.

Disclaimer

Sunrom Electronics assumes no responsibility or liability for any errors or inaccuracies that may appear in the present document. Specification and information contained in the present schematic are subject to change at any time without notice.

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