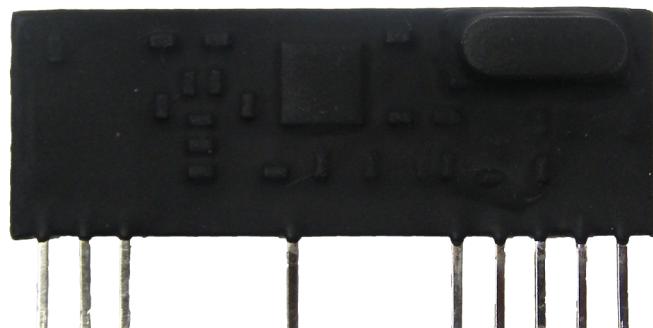




SuperHeterodyne Receiver Module



Features

- Complete RF Receiver
- PLL Enhanced Noise immunity
- CMOS / TTL Output
- Stable Operating Frequency
- Sleep Mode $0.5\mu\text{A}$
- 5Vdc Operating Voltage
- Analog RSSI Output
- Low Power Consumption
- High sensitivity
 - -113dBm @315MHz
 - -108dBm @433MHz

Applications

- Wireless Security Systems
- Car Alarms
- Remote Gate Controls
- Remote Sensing
- Data Capture
- Sensor Reporting

General Description

The RF Solutions AM Superheterodyne Receivers are compact modules, which can be used to capture undecoded data from any equivalent AM Transmitter.

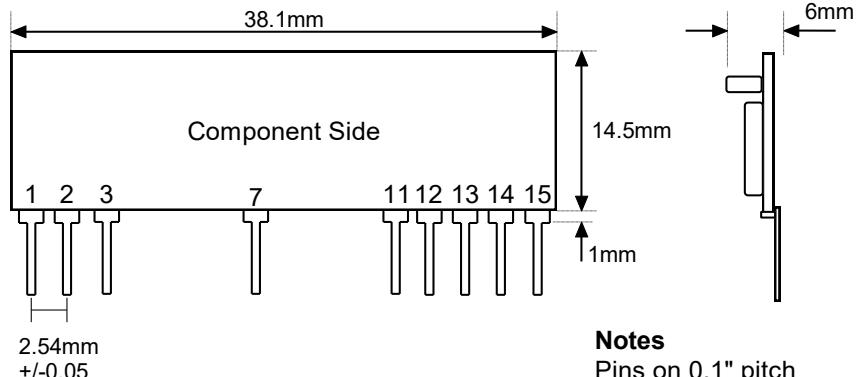
The module exhibits extremely stable electronic characteristics with no adjustable components and very reliable operation. The modules are compatible with RF Solutions Ltd. Range of AM transmitter to provide a complete Radio Link.

Ordering Information

Part Number	Description
AM-RRQ3-433P	DIL AM Transmitter Module 433.92MHz

Pin Descriptions

Pin	Description
1, 12	Supply Voltage
2, 7, 11	Ground
3	External Antenna
13	RSSI
14	Data Output
15	Power Down 0 = Standby Mode 5V = Normal Operation



Notes

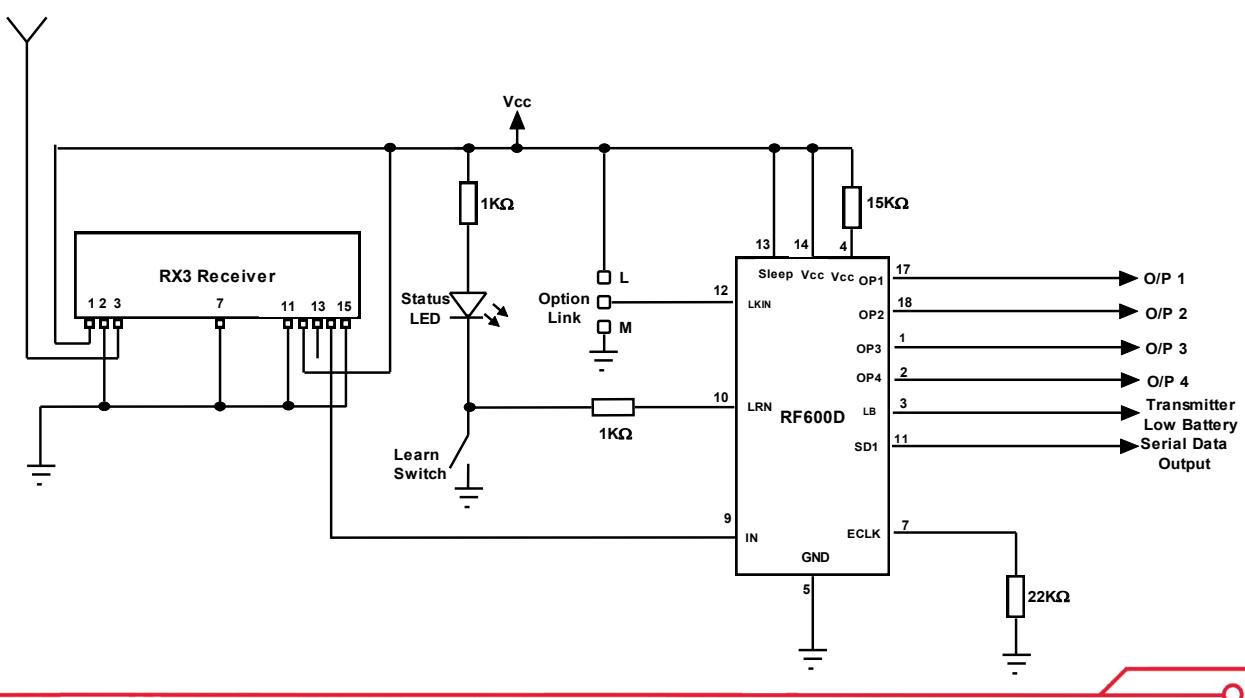
Pins on 0.1" pitch
 Pin Dims : 0.6 x 0.02mm
 Pin length: 6mm +/- 0.2
 Recomended PCB hole Ø 0.65-0.7mm

Electrical Characteristics

Ambient temp = 25°C unless otherwise stated.

Characteristic	Min	Typical	Max	Dimensions
Supply Voltage	3.3	5	8	Vdc
Supply Current		6		mA
Standby Current (PD=+Vcc)		0.5		µA
RF Sensitivity (Vcc=5V, 1Kbps AM 99% Square wave modulation)		-108		dBm @433MHz
Working Frequency		433.92		MHz
Turn On Time	25	30		ms
RSSI DC Output voltage		0.4—2		V
RSSI Response Slope @ -108dBm to -40dBm		25		mV/dBm
Operating Temperature Range	-40		+85	°C

Typical Application





RF Meter

RF Multi Meter is a versatile handheld test meter checking Radio signal strength or interference in a given area.

The Multi-Meter can both transmit and receive signals making it possible to test an installation location for suitability before installing equipment. The Multi-Meter is very hard wearing, long lasting and simple to use. It has 4 selectable frequencies, changeable at the touch of a button. It also has an auto shut off feature for battery saving.



Simplified Declaration of Conformity (RED)

BG - С настоящото RF Solutions Limited декларира, че този тип радиосъоръжение дефинирани в този документ е в съответствие с Директива 2014/53/EC. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: www.rfsolutions.co.uk

CS - Tímto RF Solutions Limited prohlašuje, že typ rádiového zařízení definované v tomto dokumentu je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: www.rfsolutions.co.uk

DA - Hermed erklærer RF Solutions Limited , at radioudstyrstypen defineret i dette dokument er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: www.rfsolutions.co.uk

DE - Hiermit erklärt RF Solutions Limited , dass der Funkanlagentyp in diesem Dokument definiert der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: www.rfsolutions.co.uk

EL - Με την παρούσα ο/η RF Solutions Limited , δηλώνει ότι ο ραδιοεξπλοσμός ορίζεται σε αυτό το έγγραφο πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δηλώσης συμμόρφωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στα διαδίκτυο: www.rfsolutions.co.uk

EN - Hereby, RF Solutions Limited declares that the radio equipment type defined within this document is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.rfsolutions.co.uk

ES - Por la presente, RF Solutions Limited declara que el tipo de equipo radioeléctrico definido dentro de este documento es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: www.rfsolutions.co.uk

ET - Käesolevaga deklareerib RF Solutions Limited , et käesolev raadioseadme tüüp määratletud selles dokumendis vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kättesaadav järgmisel internetiaadressil: www.rfsolutions.co.uk

FI - RF Solutions Limited vakuuttaa, että radiolaitetyyppi määratletud selles dokumendis on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: www.rfsolutions.co.uk

FR - Le soussigné, RF Solutions Limited , déclare que l'équipement radioélectrique du type défini dans ce document est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: www.rfsolutions.co.uk

HR - RF Solutions Limited ovime izjavljuje da je radijska oprema tipa definirani u ovom dokumentu u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: www.rfsolutions.co.uk

HU - RF Solutions Limited igazolja, hogy a dokumentumban meghatározottak szerint típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: www.rfsolutions.co.uk

IT - Il fabbricante, RF Solutions Limited , dichiara che il tipo di apparecchiatura radio definito all'interno di questo documento è conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: www.rfsolutions.co.uk

LT - Aš, RF Solutions Limited , patvirtinu, kad radioji įrenginių tipas apibrežta šiame dokumente atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo interneto adresu: www.rfsolutions.co.uk

LV - Ar šo RF Solutions Limited deklarē, ka radioiekārta kas definēts šajā dokumentā atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: www.rfsolutions.co.uk

MT - B'dan, RF Solutions Limited , niddikjara li dan it-tip ta' tagħmir tar-radju definit f'dan id-dokument huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li gej: www.rfsolutions.co.uk

NL - Hierbij verklaar ik, RF Solutions Limited , dat het type radioapparatuur gedefinieerd in dit document conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: www.rfsolutions.co.uk

PL - RF Solutions Limited niniejszym oświadcza, że typ urządzenia radiowego zdefiniowane w tym dokumencie jest zgodny z dyrektywą 2014/53/EU. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: www.rfsolutions.co.uk

PT - Ol(a) abaixo assinado(a) RF Solutions Limited declara que o presente tipo de equipamento de rádio definido neste documento está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: www.rfsolutions.co.uk

RO - Prin prezenta, RF Solutions Limited declară că tipul de echipamente radio definit în acest document este în conformitate cu Directiva 2014/53/UE. Textul integral al declaratiei UE de conformitate este disponibil la următoarea adresă internet: www.rfsolutions.co.uk

SK - RF Solutions Limited týmto vyhlasuje, že rádiové zariadenie typu definované v tomto dokumente je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: www.rfsolutions.co.uk

SL - RF Solutions Limited potruje, da je tip radijske opreme opredeljeno v tem dokumentu skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o skladnosti je na voljo na naslednjem spletnem naslovu: www.rfsolutions.co.uk

SV - Härmed försäkrar RF Solutions Limited att denna typ av radioutrustning definieras i detta dokument överensstämmmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: www.rfsolutions.co.uk



Simplified Declaration of Conformity (RED)

BG - С настоящето RF Solutions Limited декларира, че този тип радиоустройство дефинирани в този документ са в съответствие с Директива 2014/53/EC. Цялостният текст на ЕС декларацията за съответствие може да се намери на следния интернет адрес: www.rfsolutions.co.uk

CS - Tímto RF Solutions Limited prohlašuje, že typ rádiového zařízení definované v tomto dokumentu je v souladu se směrnicí 2014/53/EU. Úplné znění EU prohlášení o shodě je k dispozici na této internetové adrese: www.rfsolutions.co.uk

DA - Hermed erklærer RF Solutions Limited, at radioudstyrstypen defineret i dette dokument er i overensstemmelse med direktiv 2014/53/EU. EU-overensstemmelseserklæringens fulde tekst kan findes på følgende internetadresse: www.rfsolutions.co.uk

DE - Hiermit erklärt RF Solutions Limited, dass der Funkanlagentyp in diesem Dokument definiert der Richtlinie 2014/53/EU entspricht. Der vollständige Text der EU-Konformitätserklärung ist unter der folgenden Internetadresse verfügbar: www.rfsolutions.co.uk

EL - Με την παρούσα ο/η RF Solutions Limited, δηλώνει ότι ο ραδιοεξοπλισμός ορίζεται σε αυτό το έγγραφο πληροί την οδηγία 2014/53/ΕΕ. Το πλήρες κείμενο της δήλωσης συμφόρωσης ΕΕ διατίθεται στην ακόλουθη ιστοσελίδα στο διαδίκτυο: www.rfsolutions.co.uk

EN - Hereby, RF Solutions Limited declares that the radio equipment type defined within this document is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: www.rfsolutions.co.uk

ES - Por la presente, RF Solutions Limited declara que el tipo de equipo radioeléctrico definido dentro de este documento es conforme con la Directiva 2014/53/UE. El texto completo de la declaración UE de conformidad está disponible en la dirección Internet siguiente: www.rfsolutions.co.uk

ET - Käesolevaga deklareerib RF Solutions Limited, et käesolev radiooseadme tüüp määratletud selles dokumendis vastab direktiivi 2014/53/EL nõuetele. ELi vastavusdeklaratsiooni täielik tekst on kätesaadav järgmisel internetiaadressil: www.rfsolutions.co.uk

FI - RF Solutions Limited vakuuttaa, että radiolaitetyyppi määratletud selles dokumendis on direktiivin 2014/53/EU mukainen. EU-vaatimustenmukaisuusvakuutuksen täysimittainen teksti on saatavilla seuraavassa internetosoitteessa: www.rfsolutions.co.uk

FR - Le soussigné, RF Solutions Limited, déclare que l'équipement radioélectrique du type défini dans ce document est conforme à la directive 2014/53/UE. Le texte complet de la déclaration UE de conformité est disponible à l'adresse internet suivante: www.rfsolutions.co.uk

HR - RF Solutions Limited ovime izjavljuje da je radijska oprema tipa definirani u ovom dokumentu u skladu s Direktivom 2014/53/EU. Cjeloviti tekst EU izjave o sukladnosti dostupan je na sljedećoj internetskoj adresi: www.rfsolutions.co.uk

HU - RF Solutions Limited igazolja, hogy a dokumentumban meghatározottak szerint típusú rádióberendezés megfelel a 2014/53/EU irányelvnek. Az EU-megfelelőségi nyilatkozat teljes szövege elérhető a következő internetes címen: www.rfsolutions.co.uk

IT - Il fabbricante, RF Solutions Limited, dichiara che il tipo di apparecchiatura radio definito all'interno di questo documento è conforme alla direttiva 2014/53/UE. Il testo completo della dichiarazione di conformità UE è disponibile al seguente indirizzo Internet: www.rfsolutions.co.uk

LT - Aš, RF Solutions Limited, patvirtinu, kad radio įrenginių tipas apibrėžta šiame dokumente atitinka Direktyvą 2014/53/ES. Visas ES atitikties deklaracijos tekstas prieinamas šiuo internetu adresu: www.rfsolutions.co.uk

LV - Ar šo RF Solutions Limited deklarē, ka radioiekārta kas definēts šajā dokumentā atbilst Direktīvai 2014/53/ES. Pilns ES atbilstības deklarācijas teksts ir pieejams šādā interneta vietnē: www.rfsolutions.co.uk

MT - Bidan, RF Solutions Limited, niddikjara li dan it-tip ta' tagħmir tar-radju definit f'dan id-dokument huwa konformi mad-Direttiva 2014/53/UE. It-test kollu tad-dikjarazzjoni ta' konformità tal-UE huwa disponibbli f'dan l-indirizz tal-Internet li gej: www.rfsolutions.co.uk

NL - Hierbij verklaar ik, RF Solutions Limited, dat het type radioapparatuur gedefinieerd in dit document conform is met Richtlijn 2014/53/EU. De volledige tekst van de EU-conformiteitsverklaring kan worden geraadpleegd op het volgende internetadres: www.rfsolutions.co.uk

PL - RF Solutions Limited niniejszym oświadcza, że typ urządzenia radioowego zdefiniowane w tym dokumencie jest zgodny z dyrektywą 2014/53/UE. Pełny tekst deklaracji zgodności UE jest dostępny pod następującym adresem internetowym: www.rfsolutions.co.uk

PT - O(a) abaixo assinado(a) RF Solutions Limited declara que o presente tipo de equipamento de rádio definido neste documento está em conformidade com a Diretiva 2014/53/UE. O texto integral da declaração de conformidade está disponível no seguinte endereço de Internet: www.rfsolutions.co.uk

RO - Prin prezenta, RF Solutions Limited declară că tipul de echipamente radio definit în acest document este în conformitate cu Directiva 2014/53/UE. Textul integral al declarației UE de conformitate este disponibil la următoarea adresă internet: www.rfsolutions.co.uk

SK - RF Solutions Limited týmto vyhlasuje, že rádiové zariadenie typu definované v tomto dokumente je v súlade so smernicou 2014/53/EÚ. Úplné EÚ vyhlásenie o zhode je k dispozícii na tejto internetovej adrese: www.rfsolutions.co.uk

SL - RF Solutions Limited potrjuje, da je tip radijske opreme opredeljeno v tem dokumentu skladen z Direktivo 2014/53/EU. Celotno besedilo izjave EU o sukladnosti je na voljo na naslednjem spletnem naslovu: www.rfsolutions.co.uk

SV - Härmed försäkrar RF Solutions Limited att denna typ av radioutrustning definieras i detta dokument överensstämmer med direktiv 2014/53/EU. Den fullständiga texten till EU-försäkran om överensstämmelse finns på följande webbadress: www.rfsolutions.co.uk

RF Solutions Ltd. Recycling Notice

Meets the following EC Directives:

DO NOT

Discard with normal waste, please recycle.



ROHS Directive 2011/65/EU and amendment 2015/863/EU

Specifies certain limits for hazardous substances.

WEEE Directive 2012/19/EU

Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfills its WEEE obligations by membership of an approved compliance scheme. Environment Agency producer registration number: **WEE/JB0104WV**.

Disclaimer:

Whilst the information in this document is believed to be correct at the time of issue, RF Solutions Ltd does not accept any liability whatsoever for its accuracy, adequacy or completeness. No express or implied warranty or representation is given relating to the information contained in this document. RF Solutions Ltd reserves the right to make changes and improvements to the product(s) described herein without notice. Buyers and other users should determine for themselves the suitability of any such information or products for their own particular requirements or specification(s). RF Solutions Ltd shall not be liable for any loss or damage caused as a result of user's own determination of how to deploy or use RF Solutions Ltd's products. Use of RF Solutions Ltd products or components in life support and/or safety applications is not authorised except with express written approval. No licences are created, implicitly or otherwise, under any of RF Solutions Ltd's intellectual property rights. Liability for loss or damage resulting or caused by reliance on the information contained herein or from the use of the product (including liability resulting from negligence or where RF Solutions Ltd was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict RF Solutions Ltd's liability for death or personal injury resulting from its negligence.

www.rfsolutions.co.uk

RF Solutions Ltd

William Alexander House, William Way, Burgess Hill, West Sussex, RH15 9AG

Sales: +44 (0)1444 227900

Tech Support: +44 (0)1444 227909

