


Plugin-Daten	
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<b>Status</b>	BETA
<b>Version</b>	1.0.0
<b>Min. LB Version</b>	3
<b>Release Download</b>	<a href="https://github.com/Liver64/LoxBerry-Radioscanner/archive/refs/tags/v1.0.0.zip">https://github.com/Liver64/LoxBerry-Radioscanner/archive/refs/tags/v1.0.0.zip</a>
<b>Beschreibung</b>	Plugin um verschiedenste Funk Sensoren zu empfangen und die Daten per MQTT dem Loxone Miniserver zur Verfügung zu stellen. Dazu wird ein DVB-T USB-Empfänger benötigt der über einen RTL-SDR Chip (RTL2838) verfügt.
<b>Sprachen</b>	EN,DE

# Radioscanner

[Version History...](#)

Version 1.0.0:

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## Funktion des Plugins

Mit Hilfe des Plugins ist es möglich eine breites Spektrum an unterschiedlichsten Funk Sensoren über gängige Bandbreiten zu erfassen und die empfangenen Daten per MQTT an den MS zu schicken. Die Bandbreiten sind frei wählbar, wobei die gängigsten bereits zur Auswahl zur Verfügung stehen (315Mhz, 345Mhz, 433.92Mhz, 868.3Mhz und 915 Mhz). Dafür ist ein DVB-T USB Stick notwendig der den RTL-SDR (RTL2838) Spezifikationen entspricht.

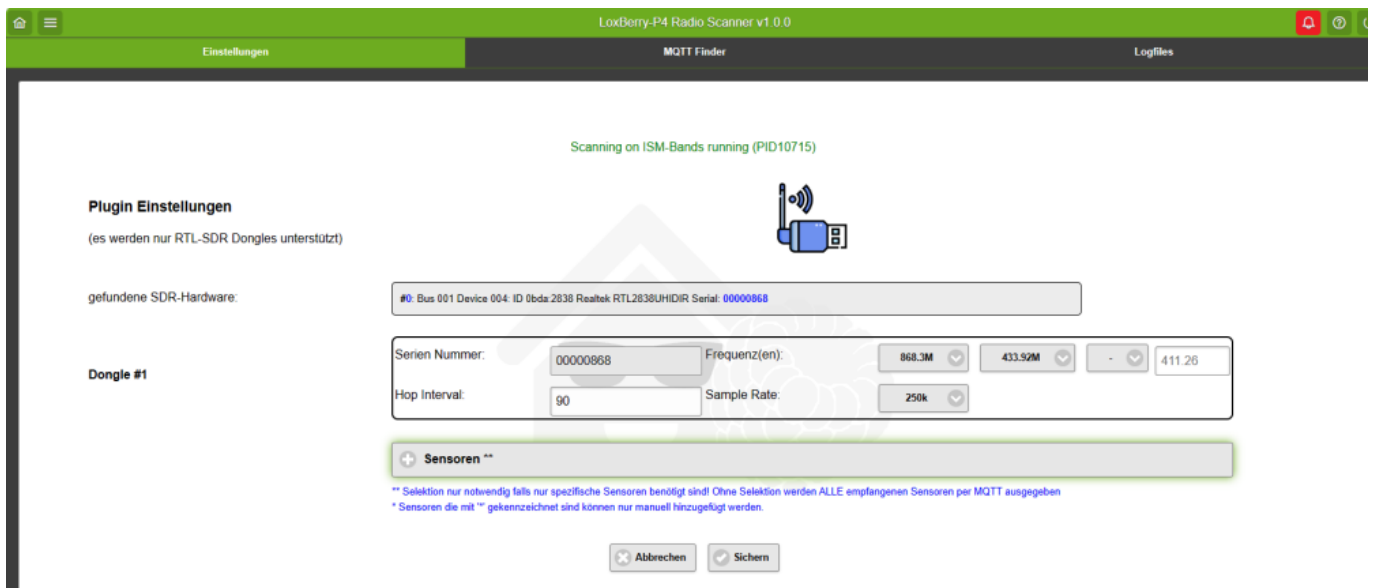
Die Sticks gibt es bereits für ca. 10€, aber auch teurere bis hin zu 90€. Die Tests haben ergeben das für unseren Hausgebrauch die günstigen vollkommen ausreichend sind. Theoretisch, je nach Antenne, können hier auch Wetterdaten oder auch Flugzeugtransponder empfangen werden. Gimmick am Rande... TPMS Daten (Reifenluftdrücke) werden u.U. empfangen (433.92Mhz).

Die Sticks gibt es bei Alibaba aber auch bei inländischen Quellen (Update/Quellen folgen)

## Download

→ verfügbare Releases <https://github.com/Liver64/LoxBerry-Radioscanner/releases>

# Konfiguration



Der verwendete Stick wird beim Laden automatisch gefunden und die Seriennummer, in den meisten Fällen 00000001, wird in das Feld Serial übertragen. Alternativ kann aber auch die ID (z.B. 0bda:2838) verwendet werden.

## Frequenzen:

Es können bis zu 3 vordefinierte Frequenzen selektiert werden, eine vierte für eine spezielle Frequenz steht als Inputfeld zur Verfügung. Hier kann entweder die Frequenz in Mhz (z.B. **868.3**) oder in Hz (z.B. **868300000**) eingegeben werden.

## Hop Interval

Hopping ist der Intervall in Sekunden zum Springen zwischen den einzelnen Frequenzbändern. Als Empfehlung ist alles über 60 Sekunden grundsätzlich OK, wobei am Anfang eher etwas mehr zu empfehlen wäre (z.B. 300). Grund dafür ist das beim Erststart erst einmal die empfangenen Daten codiert und dem entsprechenden Protokoll zugewiesen werden müssen.

## Sample Rate

Mit der Sample rate kann die Abtastfrequenz noch angepasst werden falls bei 250Khz nichts empfangen wurde. Hier stehen 4 unterschiedliche (250Khz, 1024KHz, 2048Khz und 3200Khz) zur Verfügung.

## Sensoren

Auswahl spezifischer Sensoren für den Empfang der Daten, Falls kein(e) Sensor(en) selektiert wurden

wird nach allem gescannt.

### MQTT Finder

Im **MQTT Finder** werden alle empfangenen Daten/Sensoren direkt gelistet und können anschließend in den MS eingebunden werden.

### MQTT Beispieldaten einer Bresser Wetterstation:

The screenshot shows the MQTT Gateway interface with a table of sensor data. The table has three columns: 'Miniserver Virtual Input', 'Last value', and 'Last arrived'. The data includes various sensor readings such as battery status, channel, flags, frequency, humidity, ID, microphone, modulation, noise, protocol, rain, RSSI, sensor type, and SNR.

Miniserver Virtual Input	Last value	Last arrived
rti_433_172_Bresser-6in1_554705295_battery_ok	1	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_channel	0	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_flags	0	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_freq1	868.25126	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_freq2	868.35853	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_humidity	92	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_id	554705295	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_mic	CRC	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_mod	FSK	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_noise	-27.8306	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_protocol	172	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_rain_mm	218.8	29.11.14.18:49
rti_433_172_Bresser-6in1_554705295_rssi	-5.20869	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_sensor_type	1	29.11.14.19:01
rti_433_172_Bresser-6in1_554705295_snr	22.62187	29.11.14.19:01

## Hardware bzw. Sensoren

Folgende Hardware wurde erfolgreich getestet: [Funktechnik](#)

Folgende Sensoren werden derzeit supported:

[01]	Silvercrest Remote Control
[02]	Rubicson, TFA 30.3197 or InFactory PT-310 Temperature Sensor
[03]	Prologue, FreeTec NC-7104, NC-7159-675 temperature sensor
[04]	Waveman Switch Transmitter
[06]*	ELV EM 1000
[07]*	ELV WS 2000
[08]	LaCrosse TX Temperature / Humidity Sensor
[10]	Acurite 896 Rain Gauge
[11]	Acurite 609TXC Temperature and Humidity Sensor
[12]	Oregon Scientific Weather Sensor
[13]*	Mebus 433
[14]*	Intertechno 433

[15]	KlikAanKlikUit Wireless Switch
[16]	AlectoV1 Weather Sensor (Alecto WS3500 WS4500 Ventus W155/W044 Oregon)
[17]	Cardin S466-TX2
[18]	Fine Offset Electronics, WH2, WH5, Telldus Temperature/Humidity/Rain Sensor
[19]	Nexus, FreeTec NC-7345, NX-3980, Solight TE82S, TFA 30.3209 temperature/humidity sensor
[20]	Ambient Weather F007TH, TFA 30.3208.02, SwitchDocLabs F016TH temperature sensor
[21]	Calibeur RF-104 Sensor
[22]	X10 RF
[23]	DSC Security Contact
[24]*	Brennenstuhl RCS 2044
[25]	Globaltronics GT-WT-02 Sensor
[26]	Danfoss CFR Thermostat
[29]	Chuango Security Technology
[30]	Generic Remote SC226x EV1527
[31]	TFA-Twin-Plus-30.3049, Conrad KW9010, Ea2 BL999
[32]	Fine Offset Electronics WH1080/WH3080 Weather Station
[33]	WT450, WT260H, WT405H
[34]	LaCrosse WS-2310 / WS-3600 Weather Station
[35]	Esperanza EWS
[36]	Efergy e2 classic
[37]*	Inovalley kw9015b, TFA Dostmann 30.3161 (Rain and temperature sensor)
[38]	Generic temperature sensor 1
[39]	WG-PB12V1 Temperature Sensor
[40]	Acurite 592TXR Temp/Humidity, 592TX Temp, 5n1 Weather Station, 6045 Lightning, 899 Rain, 3N1, Atlas
[41]	Acurite 986 Refrigerator / Freezer Thermometer
[42]	HIDEKI TS04 Temperature, Humidity, Wind and Rain Sensor
[43]	Watchman Sonic / Apollo Ultrasonic / Beckett Rocket oil tank monitor
[44]	CurrentCost Current Sensor
[45]	emonTx OpenEnergyMonitor
[46]	HT680 Remote control
[47]	Conrad S3318P, FreeTec NC-5849-913 temperature humidity sensor
[48]	Akhan 100F14 remote keyless entry
[49]	Quhwa
[50]	OSv1 Temperature Sensor
[51]	Proove / Nexa / KlikAanKlikUit Wireless Switch
[52]	Bresser Thermo-/Hygro-Sensor 3CH
[53]	Springfield Temperature and Soil Moisture
[54]	Oregon Scientific SL109H Remote Thermal Hygro Sensor
[55]	Acurite 606TX Temperature Sensor
[56]	TFA pool temperature sensor
[57]	Kedsum Temperature & Humidity Sensor, Pearl NC-7415
[58]	Blyss DC5-UK-WH
[59]	Steelmate TPMS
[60]	Schrader TPMS
[61]*	LightwaveRF

[62]*	Elro DB286A Doorbell
[63]	Efergy Optical
[64]*	Honda Car Key
[67]	Radiohead ASK
[68]	Kerui PIR / Contact Sensor
[69]	Fine Offset WH1050 Weather Station
[70]	Honeywell Door/Window Sensor, 2Gig DW10/DW11, RE208 repeater
[71]	Maverick ET-732/733 BBQ Sensor
[72]*	RF-tech
[73]	LaCrosse TX141-Bv2, TX141TH-Bv2, TX141-Bv3, TX141W, TX145wsdth, (TFA, ORIA) sensor
[74]	Acurite 00275rm,00276rm Temp/Humidity with optional probe
[75]	LaCrosse TX35DTH-IT, TFA Dostmann 30.3155 Temperature/Humidity sensor
[76]	LaCrosse TX29IT, TFA Dostmann 30.3159.IT Temperature sensor
[77]	Vaillant calorMatic VRT340f Central Heating Control
[78]	Fine Offset Electronics, WH25, WH32B, WH24, WH65B, HP1000, Misol WS2320 Temperature/Humidity/Pressure Sensor
[79]	Fine Offset Electronics, WH0530 Temperature/Rain Sensor
[80]	IBIS beacon
[81]	Oil Ultrasonic STANDARD FSK
[82]	Citroen TPMS
[83]	Oil Ultrasonic STANDARD ASK
[84]	Thermopro TP11 Thermometer
[85]	Solight TE44/TE66, EMOS E0107T, NX-6876-917
[86]	Wireless Smoke and Heat Detector GS 558
[87]	Generic wireless motion sensor
[88]	Toyota TPMS
[89]	Ford TPMS
[90]	Renault TPMS
[91]	inFactory, nor-tec, FreeTec NC-3982-913 temperature humidity sensor
[92]	FT-004-B Temperature Sensor
[93]	Ford Car Key
[94]	Philips outdoor temperature sensor (type AJ3650)
[95]	Schrader TPMS EG53MA4, PA66GF35
[96]	Nexa
[97]	ThermoPro TP08/TP12/TP20 thermometer
[98]	GE Color Effects
[99]	X10 Security
[100]	Interlogix GE UTC Security Devices
[101]*	Dish remote 6.3
[102]	SimpliSafe Home Security System (May require disabling automatic gain for KeyPad decodes)
[103]	Sensible Living Mini-Plant Moisture Sensor
[104]	Wireless M-Bus, Mode C&T, 100kbps (-f 868.95M -s 1200k)
[105]	Wireless M-Bus, Mode S, 32.768kbps (-f 868.3M -s 1000k)
[106]*	Wireless M-Bus, Mode R, 4.8kbps (-f 868.33M)
[107]*	Wireless M-Bus, Mode F, 2.4kbps
[108]	Hyundai WS SENZOR Remote Temperature Sensor

[109]	WT0124 Pool Thermometer
[110]	PMV-107] (Toyota) TPMS
[111]	Emos TTX201 Temperature Sensor
[112]	Ambient Weather TX-8300 Temperature/Humidity Sensor
[113]	Ambient Weather WH31E Thermo-Hygrometer Sensor, EcoWitt WH40 rain gauge
[114]	Maverick et73
[115]	Honeywell ActivLink, Wireless Doorbell
[116]	Honeywell ActivLink, Wireless Doorbell (FSK)
[117]*	ESA1000 / ESA2000 Energy Monitor
[118]*	Biltema rain gauge
[119]	Bresser Weather Center 5-in-1
[120]	Digitech XC-0324 / AmbientWeather FT005TH temp/hum sensor
[121]	Opus/Imagintronix XT300 Soil Moisture
[122]*	FS20
[123]*	Jansite TPMS Model TY02S
[124]	LaCrosse/ELV/Conrad WS7000/WS2500 weather sensors
[125]	TS-FT002 Wireless Ultrasonic Tank Liquid Level Meter With Temperature Sensor
[126]	Companion WTR001 Temperature Sensor
[127]	Ecowitt Wireless Outdoor Thermometer WH53/WH0280/WH0281A
[128]	DirecTV RC66RX Remote Control
[129]*	Eurochron temperature and humidity sensor
[130]	IKEA Sparsnas Energy Meter Monitor
[131]	Microchip HCS200/HCS300 KeeLoq Hopping Encoder based remotes
[132]	TFA Dostmann 30.3196 T/H outdoor sensor
[133]	Rubicson 48659 Thermometer
[134]	AOK Weather Station rebrand Holman Industries iWeather WS5029, Conrad AOK-5056, Optex 990018
[135]	Philips outdoor temperature sensor (type AJ7010)
[136]	ESIC EMT7110 power meter
[137]	Globaltronics QUIGG GT-TMBBQ-05
[138]	Globaltronics GT-WT-03 Sensor
[139]	Norgo NGE101
[140]	Elantra2012 TPMS
[141]	Auriol HG02832, HG05124A-DCF, Rubicson 48957 temperature/humidity sensor
[142]	Fine Offset Electronics/ECOWITT WH51, SwitchDoc Labs SM23 Soil Moisture Sensor
[143]	Holman Industries iWeather WS5029 weather station (older PWM)
[144]	TBH weather sensor
[145]	WS2032 weather station
[146]	Auriol AFW2A1 temperature/humidity sensor
[147]	TFA Drop Rain Gauge 30.3233.01
[148]	DSC Security Contact (WS4945)
[149]	ERT Standard Consumption Message (SCM)
[150]*	Klimalogg
[151]	Visonic powercode
[152]	Eurochron EFTH-800 temperature and humidity sensor
[153]	Cotech 36-7959, SwitchDocLabs FT020T wireless weather station with USB

[154]	Standard Consumption Message Plus (SCMplus)
[155]	Fine Offset Electronics WH1080/WH3080 Weather Station (FSK)
[156]	Abarth 124 Spider TPMS
[157]	Missil ML0757 weather station
[158]	Sharp SPC775 weather station
[159]	Insteon
[160]	ERT Interval Data Message (IDM)
[161]	ERT Interval Data Message (IDM) for Net Meters
[162]*	ThermoPro-TX2 temperature sensor
[163]	Acurite 590TX Temperature with optional Humidity
[164]	Security+ 2.0 (Keyfob)
[165]	TFA Dostmann 30.3221.02 T/H Outdoor Sensor
[166]	LaCrosse Technology View LTV-WSDTH01 Breeze Pro Wind Sensor
[167]	Somfy RTS
[168]	Schrader TPMS SMD3MA4 (Subaru) 3039 (Infiniti, Nissan, Renault)
[169]*	Nice Flor-s remote control for gates
[170]	LaCrosse Technology View LTV-WR1 Multi Sensor
[171]	LaCrosse Technology View LTV-TH Thermo/Hygro Sensor
[172]	Bresser Weather Center 6-in-1, 7-in-1 indoor, soil, new 5-in-1, 3-in-1 wind gauge, Froggit WH6000, Ventus C8488A
[173]	Bresser Weather Center 7-in-1, Air Quality PM2.5 / PM10
[174]	EcoDHOMe Smart Socket and MCEE Solar monitor
[175]	LaCrosse Technology View LTV-R1, LTV-R3 Rainfall Gauge, LTV-W1/W2 Wind Sensor
[176]	BlueLine Innovations Power Cost Monitor
[177]	Burnhard BBQ thermometer
[178]	Security+ (Keyfob)
[179]	Cavius smoke, heat and water detector
[180]	Jansite TPMS Model Solar
[181]	Amazon Basics Meat Thermometer
[182]	TFA Marbella Pool Thermometer
[183]	Auriol AHFL temperature/humidity sensor
[184]	Auriol AFT 77 B2 temperature sensor
[185]	Honeywell CM921 Wireless Programmable Room Thermostat
[186]	Hyundai TPMS (VDO)
[187]	RojaFlex shutter and remote devices
[188]	Marlec Solar iBoost+ sensors
[189]	Somfy io-homecontrol
[190]	Ambient Weather WH31L (FineOffset WH57) Lightning-Strike sensor
[191]	Markisol, E-Motion, BOFU, Rollerhouse, BF-30x, BF-415 curtain remote
[192]	Govee Water Leak Detector H5054, Door Contact Sensor B5023
[193]	Clipsal CMR113 Cent-a-meter power meter
[194]	Inkbird ITH-20R temperature humidity sensor
[195]	RainPoint soil temperature and moisture sensor
[196]	Atech-WS308 temperature sensor
[197]	Acurite Grill/Meat Thermometer 01185M
[198]*	EnOcean ERP1

[199]	Linear Megacode Garage/Gate Remotes
[200]*	Auriol 4-LD5661/4-LD5972/4-LD6313 temperature/rain sensors
[201]	Unbranded SolarTPMS for trucks
[202]	Funkbus / Instafunk (Berker, Gira, Jung)
[203]	Porsche Boxster/Cayman TPMS
[204]	Jasco/GE Choice Alert Security Devices
[205]	Telldus weather station FT0385R sensors
[206]	LaCrosse TX34-IT rain gauge
[207]	SmartFire Proflame 2 remote control
[208]	AVE TPMS
[209]	SimpliSafe Gen 3 Home Security System
[210]	Yale HSA (Home Security Alarm), YES-Alarmkit
[211]	Regency Ceiling Fan Remote (-f 303.75M to 303.96M)
[212]	Renault 0435R TPMS
[213]	Fine Offset Electronics WS80 weather station
[214]	EMOS E6016 weatherstation with DCF77
[215]	Emax W6, rebrand Altronics x7063/4, Optex 990040/50/51, Orium 13093/13123, Infactory FWS-1200, Newentor Q9, Otio 810025, Protmex PT3390A, Jula Marquant 014331/32, Weather Station or temperature/humidity sensor
[216]*	ANT and ANT+ devices
[217]	EMOS E6016 rain gauge
[218]	Microchip HCS200/HCS300 KeeLoq Hopping Encoder based remotes (FSK)
[219]	Fine Offset Electronics WH45 air quality sensor
[220]	Maverick XR-30 BBQ Sensor
[221]	Fine Offset Electronics WN34 temperature sensor
[222]	Rubicson Pool Thermometer 48942
[223]	Badger ORION water meter, 100kbps (-f 916.45M -s 1200k)
[224]	GEO minim+ energy monitor
[225]	TyreGuard 400 TPMS
[226]	Kia TPMS (-s 1000k)
[227]	SRSmith Pool Light Remote Control SRS-2C-TX (-f 915M)
[228]	Neptune R900 flow meters
[229]	WEC-2103 temperature/humidity sensor
[230]	Vauno EN8822C
[231]	Govee Water Leak Detector H5054
[232]	TFA Dostmann 14.1504.V2 Radio-controlled grill and meat thermometer
[233]*	CED7000 Shot Timer
[234]	Watchman Sonic Advanced / Plus, Tekelek
[235]	Oil Ultrasonic SMART FSK
[236]	Gasmate BA1008 meat thermometer
[237]	Flowis flow meters
[238]	Wireless M-Bus, Mode T, 32.768kbps (-f 868.3M -s 1000k)
[239]	Revolt NC-5642 Energy Meter
[240]	LaCrosse TX31U-IT, The Weather Channel WS-1910TWC-IT
[241]	EezTire E618, Carchet TPMS
[242]*	Baldr / RainPoint rain gauge.



[243]	Celsia CZC1 Thermostat
[244]	Fine Offset Electronics WS90 weather station
[245]*	ThermoPro TX-2C Thermometer and Humidity sensor
[246]	TFA 30.3151 Weather Station
[247]	Bresser water leakage
[248]*	Nissan TPMS
[249]	Bresser lightning
[250]	Schou 72543 Day Rain Gauge

Die mit \* gekennzeichneten müssen manuell hinzugefügt werden.

## Einrichtung in der Loxone Config Software

→ Die Daten werden über MQTT dem Miniserver zur Verfügung gestellt. Um diese dann zu nutzen bitte den MQTT Richtlinien folgen.

## Roadmap

→ Multi Dongles (bis zu 3 USB Sticks/Dongles)

## Fragen stellen und Fehler melden

<https://www.loxforum.com/forum/projektforen/loxberry/plugins/412617-radioscanner>

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