



## FM/LoRa Hand Held Transmitter

### Features

- Rugged RF Transmitter Handset
- Supplied "Ready to Go"
- 1 - 16 Switches
- 868 / 918MHz Versions
- FM / LoRa Technology
- Range:
  - LORA Mode 7 upto **20Km**
  - FM Operation upto **2Km**
- Waterproof Up to IP67
- Compatible with RF Solutions Receivers
- Internal Lithium Battery 1AH
- Wireless Rechargeable
- Displays Acknowledge from Receiver
- Watchdog Transmit Feature
- Continuous or State Change Transmit
- CE Compliant & FCC Certified



### Applications

- Industrial, conveyors, machinery, pumps etc
- General Purpose Remote Switching
- M2M Control Switching

### Description

A rugged Remote Transmitter which can be used with one of the RF Solutions receivers to generate a long Range Remote Control System. The Transmitter may be user configured to operate in several Modes of operation, providing shorter or longer range and with optional Acknowledge indication back from the receiver.

Supplied ready to go the SCORPION Transmitter is a sealed waterproof enclosure with fixed internal **Lithium Battery**, which is recharged using standard Qi wireless charger base.

# SCORPION LoRa Transmitter



## Part Numbers



Transmitter	868MHz (Europe)	915MHz (USA, Aus, UK)
1 Switch	SCORPION-8TW1	SCORPION-9TW1
2 Switch ON / OFF	SCORPION-8TLW1	
4 Switch	SCORPION-8TW4	SCORPION-9TW4
8/16 Switch	SCORPION-8TW16	SCORPION-9TW16

## Mechanical Dimensions

(All dimensions in mm)



# SCORPION LoRa Transmitter



## Optional Accessory - Wireless Charger— WCHARGEPAD

A Wireless charger that can be used flat, supplied with USB Cable



## Compatible Receivers

Scorpion Transmitters are compatible with all RF Solutions FM and LoRa Receivers.

### PRO Series Receiver Units

IP65 Receiver with DIN Rail Modules  
4, 8, 16 Channels Changeover Contacts  
expandable to 250 using add-on Relay modules  
110-230Vac or 12-30Vdc supply



### 725 DIN Rail Module

DIN Rail Receiver  
2 Channels Relay changeover contact outputs  
expandable to 250 using add-on Relay modules  
12-30Vdc supply



### SLIMDIN Receiver

Compact DIN Rail Receiver  
4 Channels Relay outputs  
12-30Vdc supply



# SCORPION LoRa Transmitter



## Technical Specifications

Enclosure Rating: IP66

Battery Type: Internal Lithium Polymer 980mAH

The Batteries are fixed internally and are not removable

Electrical Characteristics	Min	Typical	Max	Units
Supply Voltage	3.3	4.5	5	V
Frequency:		869.500 918.000		MHz
RF Output Power (ERP)	-	22		dBm

## Important European compliance information

This RF Solutions product meets the essential requirements of the European Radio Equipment Directive 2014/53/EU and has been tested to European Harmonised Standards and CE marked accordingly.

Please note that if using this product in LORA Modes 5,6,7 in "Continuous Transmission Mode" the user must only operate for 6 mins in every hour in order to comply with Duty Cycle regulations

A copy of the EU Declaration of Conformity can be located on the RF Solutions Website,

[www.rfsolutions.co.uk/certification-i59](http://www.rfsolutions.co.uk/certification-i59).

## SUPPLIER'S DECLARATION OF CONFORMITY

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 not accept any interference received, including interference that may cause undesired operation.

47 CFR 2.1077 Compliance Information

This Declaration of Conformity is hereby issued according to Chapter 1, Subpart A, Part 2 of Title 47 of the code of Federal Regulations by:

RF Solutions Limited  
William Alexander House  
William Way  
Burgess Hill  
West Sussex  
RH15 9AG  
United Kingdom

Trade Name	Model
RF Solutions LoRa Scorpion	SCORPION-9T1 SCORPION-9T4 SCORPION-9T16



Contains FCC ID: P90LAMBDA62  
Complies with FCC Part 15.247

## United States Responsible Party

Violette Engineering Corporation, 6731 Whittier Avenue, McLean, VA 22101  
info@violettecorp.com

The responsible party warrants that each unit of equipment marketed under this Declaration of Conformity will be identical to the unit tested and found acceptable with the standards and that the records maintained by the responsible party continue to reflect the equipment being produced under such Supplier's Declaration of Conformity continue to comply within the variation that can be expected due to quantity production and testing on a statistical basis.

## Australia SRD Certification (918MHz versions)

At the time of writing the SCORPION is at the Test lab undergoing approvals testing. This is expected to be completed during 2021.



# SCORPION LoRa Transmitter



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Meets the following EC Directives:

#### DO NOT

Discard with normal waste, please recycle.

#### ROHS Directive 2011/65/EU and amendment 2015/6863/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., fulfils its WEEE obligations by membership of an approved compliance scheme, environment agency registration number **WEE/JB0104WV**.



### Waste Batteries and Accumulators Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

RF Solutions battery producer number **BPRN00060**.

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