

# XBee USB RF Stick X-URS-101

with built-in Digi XBee® XR 868 RF-Module

Preliminary version.

**Our brand new USB stick with integrated Digi XBee® RF module, Micro size, for direct access with range to your wireless network from your laptop, smartphone or PC.** For example, for controlling, analyzing and debugging your data transmission in real time. Available with different RF module types or also for your matching XBee Micro RF module for "self-resolving". In this version the pre-certified module operates between 863 and 870 MHz in compliance with European standards.

RF-Module Type	<b>Digi XBee® XR 868</b>	<b>a Product of © Digi International Inc.</b>
Part No	<b>XB-8XR-DUM-001</b>	
Firmware No	<b>0xA00x</b>	

More details see data sheet of the RF-Module.

[www.digi.com](http://www.digi.com)

Errors excepted. Subject to alteration without notice.

Frequency min.	<b>863 MHz</b>
Frequency max.	<b>870 MHz</b>
Used Channels	<b>Up to 28 Channels</b> <small>see module datasheet</small>
Security	<b>128-bit AES encryption</b>
Line of Sight Range	<b>Up to 14.5 km with 2.1 dBi antenna</b>
RF Bitrate max.	<b>10 kbps or 80 kbps, Software selectable by Digi XCTU App</b>
Output Power ERP	<b>Up to 12 dBm (16mW) ERP</b>
dBi max	<b>2.1 dBi</b>
Receiver Sensitivity	<b>-107 dBm at 80 Kbps, -112 dBm at 10 Kbps</b>

Connector Type	<b>SMA female</b>
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Interface	<b>USB</b>
Interface $\mu$ C	<b>FT232R USB UART IC from FTDI</b>
UART Data Rate	<b>Up to 921.6 kbps</b>
Preset to	<b>115.2 kbps</b>

Supply Voltage	<b>3.4 V typ. +/- 2%</b>
Operating Supply Current	<b>typ. 36 mA in receiving mode</b> <b>Up to 95 mA while transmitting data</b>
DC/DC Regulator	<b>Step Down</b>
High Efficiencies	<b>Up to 90 %</b>

Signal Lamps	<b>Green</b> (RSSI Signal Strength)
	<b>Orange</b> (ASSOC Link)
	<b>Orange</b> (RX/TX Data)



**Techsheet**

Operating Temperature     **-20° .. +70°C**  
Storage Conditions         **< 40°C < 90% RH**

Housing Material           **PETG-CF**

Size                         **90.5 x 34.2 x 11.4 mm (LxWxH)**  
Weight                     **26 gr.**

Regulatory conformity  
summary                   **CE / UKCA**  
                               **RED**

**DIN EN ISO 12100:2011-03**  
**DIN EN IEC 60947-1:2022-03**  
**DIN EN 61000-1-2:2017-07**  
**DIN EN 300220-2:2018-09**

ROHS                       **Compliant**



## Safety Instructions

### Digi XBee® XR 868 modules

- The XBee radio module cannot be guaranteed operation due to the radio link and so should not be used for interlocks in safety critical devices such as machines or automotive applications.
- The XBee radio module has not been approved for use in (this list is not exhaustive):
  - medical devices
  - nuclear applications
  - explosive or flammable atmospheres
- There are no user serviceable components inside the XBee radio module. Do not remove the shield or modify the XBee in any way. Modifications may exclude the module from any warranty and can cause the XBee radio to operate outside of regulatory compliance for a given country, leading to the possible illegal operation of the radio.
- Use industry standard ESD protection when handling the XBee module.
- Take care while handling to avoid electrical damage to the PCB and components.
- Do not expose XBee radio modules to water or moisture.
- Use this product with the antennas specified in the XBee module user guides.
- The end user must be told how to remove power from the XBee radio module or to locate the antennas 20 cm from humans or animals.

More information see data sheet of the RF-Module.

**[www.digi.com](http://www.digi.com)**

Errors excepted. Subject to alteration without notice.

We accept no responsibility for the accuracy and content of external links.

This electronic component has been designed and developed for usage in general electronic equipment only. This product is not authorized for use in equipment where a higher safety standard and reliability standard is especially required or where a failure of the product is reasonably expected to cause severe personal injury or death, unless the parties have executed an agreement specifically governing such use. Moreover Wiebrock GmbH & Co. KG products are neither designed nor intended for use in areas such as military, aerospace, aviation, nuclear control, submarine, transportation (automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network etc. Wiebrock GmbH & Co. KG must be informed about the intent of such usage before the design-in stage. In addition, sufficient reliability evaluation checks for safety must be performed on every electronic component which is used in electrical circuits that require high safety and reliability functions or performance.

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**Techsheet**

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