

Network Radio Receiver



Features

- RF-RXS DIN rail mounted housing with serial connection to COM1 or COM2 of a JACE



Specifications

Radio Output:	Frequency 2.4GHz 16 channels, automatically selected Direct-sequence spread spectrum Compliance IEEE 802.15.4-2006
Aerial Characteristics:	Gain 3.0dBi VSWR <2:1
Data Encryption:	AES 128
Power Output:	+10dBm
Power Supply:	24Vdc \pm 15% 24Vac \pm 15%, 50/60 Hz
Serial communications:	USB 2.0 Serial 9-pin RS-232
Environmental:	Operating Temperature -10°C to +50°C RH 0 to 90%, non-condensing Storage Temperature -10°C to +80°C RH 0 to 90%, non-condensing
Dimensions:	100mm x 70mm x 58mm
Country of origin:	UK

Product Codes

RF-RXS
DIN-rail Mounted Network Radio Receiver

RF-AERIAL-PM2
Aerial extension c/w bulk head fitting - 2m

RF-AERIAL-PM5
Aerial extension c/w bulk head fitting - 5m

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Technical Overview

The **Sontay RF-RXS** receiver collect data from all other devices on the radio network, including measurements from sensors, link quality for all links formed in the network, battery levels for all battery powered devices, hours run for all devices and the current status of all devices.

NB Each receiver can support a maximum of **16 directly connected "children"**, which can consist of a maximum of 12 battery powered nodes and 4 routers, or up to 16 routers if there are no battery powered nodes.

The wireless nodes are based on direct-sequence spread spectrum communication in the 2.4 - 2.5GHz band, compliant with IEEE 802.15.4-2006.

Environmental

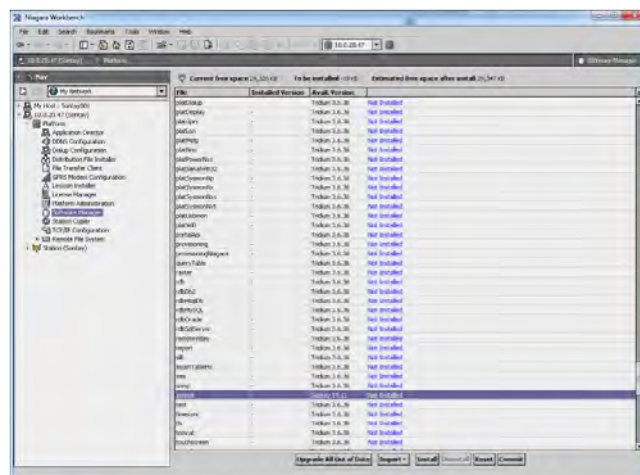
- Storage temperature range of -10 to +80°C
- Storage relative humidity range of 0 to 90% (non-condensing)
- Ambient (operating) temperature range of -10°C to +50°C
- Ambient (operating) relative humidity range of 0 to 90%, (non-condensing)

Configuring the Wireless Network

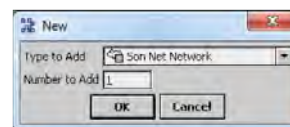
The following instructions assume you are familiar with the Tridium Workbench and its related functions. This section guides you through the steps to set up a SonNet wireless network. Install the wireless card on the JACE controller before you begin.

Note: Workbench version 3.6.36 or greater is required.

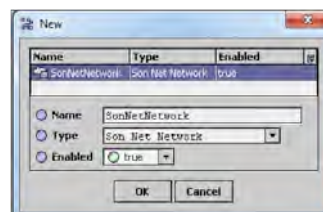
1. Connect the 9-pin serial port on the receiver to the 9-pin serial port on the JACE. Do NOT use a null modem cable.
2. Copy the SonNet.jar file to your local Niagara Module folder. The .jar file BETA is available on request.
3. Open the controller's Platform, then click on Software Manager.
4. Select the SonNet file to install on the station.
5. Click on the Install button, and then click on the Commit button.



6. Reboot the controller to properly load the .jar file. The wireless card will not work unless you reboot after installing the file.
7. Once installed and rebooted connect to the station, expand Config and select Drivers. Click the new button.
8. Select SonNet Network from the list of available drivers and click OK.



9. Rename the driver if required.



10. Open the property sheet of the SonNet network driver. Right click on "Communicator" and from the available actions select "Assert External Communications".

