

DAS-429USB/RxTx

**ARINC 429 Communication Device for
USB Interface Systems**

Mechanical and Electrical Specifications



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This document describes the mechanical and electrical specifications of the *DAS-429USB/RxTx*, and contains the following sections:

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Overview

The *DAS-429USB/RxTx* is a multi-channel, bus monitor ARINC 429 device with USB host interface. Its compact ruggedized assembly and enclosure is designed to meet a wide range of environmental requirements. Small, light, low power and versatile, the *DAS-429USB/RxTx* is a solution for extreme field applications as well as development and testing of the ARINC 429 bus in the lab.

The *DAS-429USB/RxTx* shares its API with the entire RTx family so that applications currently running on our 429UNET, PCIe, PCI, ExpressCard, or PCMCIA cards, will run seamlessly here as well. Multiple units can be connected to your PC or laptop USB ports.

The *DAS-429USB/RxTx* conforms to MIL-STD-454 requirements for process, parts and workmanship.

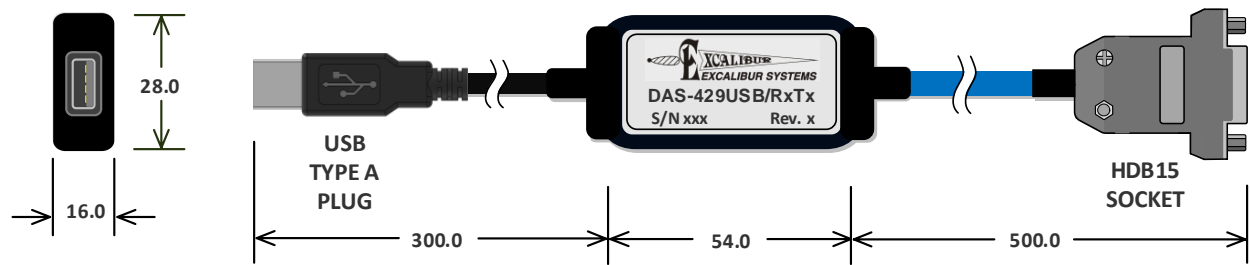
Additional Documents

For developing applications, refer to the applicable sections of the *429RTx & Discrete Software Tools Programmer's Reference*.

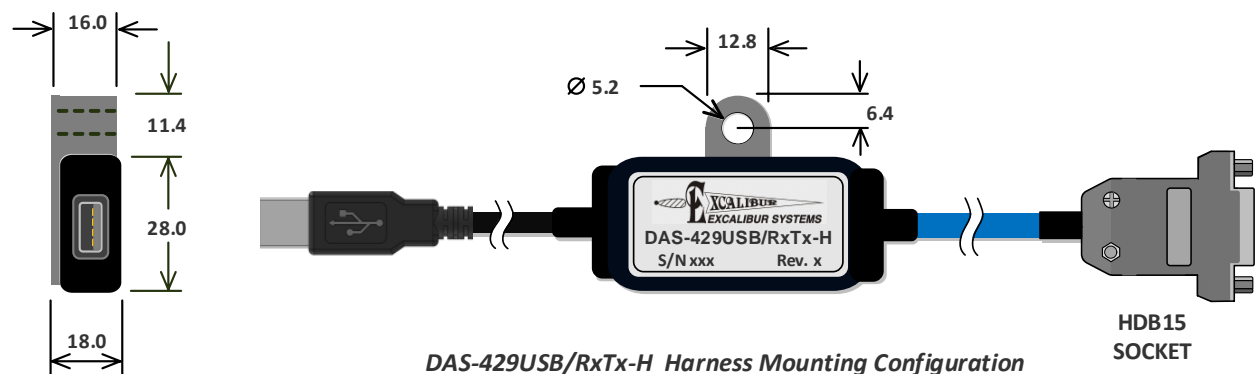
Setting up the *DAS-429USB/RxTx* is similar to the *DAS-429UNET/RTx*. Refer to the **Installation and Setup** chapter of the *DAS-429UNET/RTx User's Manual*.

Note: Only the USB parts of the installation are relevant.

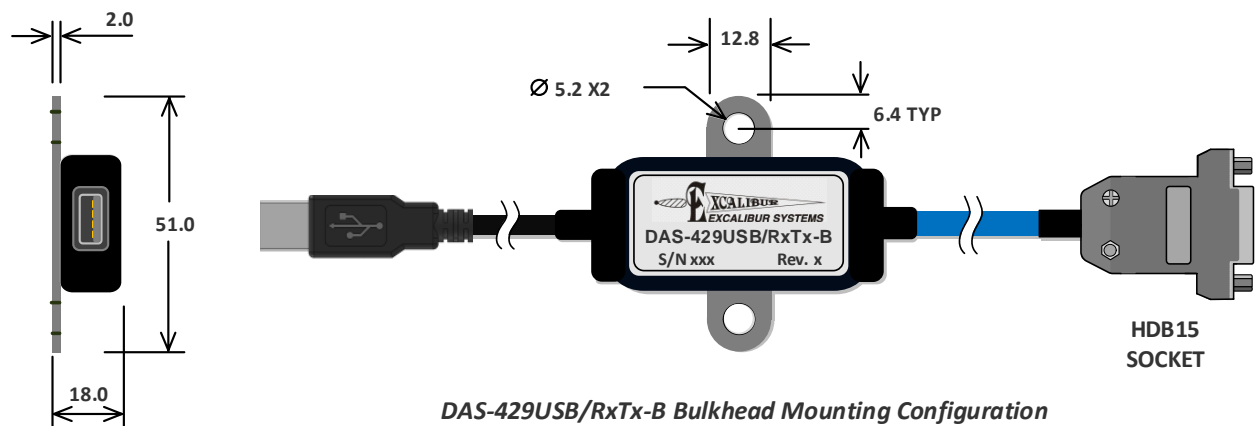
Dimensions



DAS-429USB/RxTx Configuration



DAS-429USB/RxTx-H Harness Mounting Configuration



DAS-429USB/RxTx-B Bulkhead Mounting Configuration

All dimensions are in millimeters

Dimensions

Connectors

The *DAS-429USB/RxTx* has two connectors:

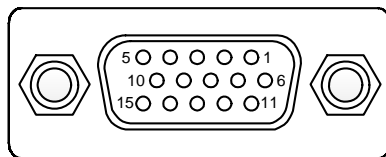
- 1 USB Type A plug
- 1 HDB 15-pin female connector with jack posts (#4-40)

USB Type A Plug Connector

Standard USB Type A plug connector.

HDB 15-Pin Female Connectors

The I/O connector is a standard 15-pin, high density, D-type, female connector. The connector mates with a standard 15-pin, high density, D-type, male connector.



HDB 15-Pin Female Connector – Front View

Pin#	Signal Name	Description
1	CH0H	Channel 0 ARINC-429 high line connection
2	CH0L	Channel 0 ARINC-429 low line connection
3	CH1H	Channel 1 ARINC-429 high line connection
4	CH1L	Channel 1 ARINC-429 low line connection
5	CH2H	Channel 2 ARINC-429 high line connection
6	CH2L	Channel 2 ARINC-429 low line connection
7	CH3H	Channel 3 ARINC-429 high line connection
8	CH3L	Channel 3 ARINC-429 low line connection
9	CH4H	Channel 4 ARINC-429 high line connection
10	CH4L	Channel 4 ARINC-429 low line connection
11	CH5H	Channel 5 ARINC-429 high line connection
12	CH5L	Channel 5 ARINC-429 low line connection
13	GND	Digital Ground
14	N/C	N/C

HDB 15-Pin Female Connector Pinouts

Power Requirements

The maximum power requirements for the *DAS-429USB/RxTx* are 5V @ 450mA (max.).

Ordering Information

This section describes the part numbers to indicate when ordering an *DAS-429USB/RxTx* card.

Part Number	Option	Description
DAS-429USB/R2T4		ARINC 429 device with 2 Rx channels and 4 Tx channels with USB interface.
DAS-429USB/R4T2		ARINC 429 device with 4 Rx channels and 2 Tx channels with USB interface.
	-H	Add this suffix for Harness Mounting Configuration.
	-B	Add this suffix for Bulkhead Mounting Configuration.

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