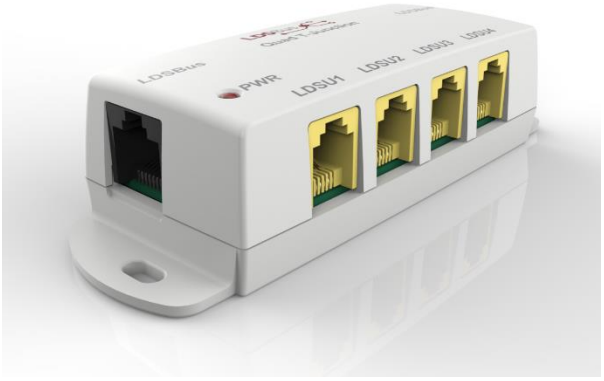
LDSBus HVT - Junction Datasheet



1 Introduction

The LDSBus HVT-Junction connects LDSBus Devices (Sensors /Actuators) to the LDSBus. It serves as a data and power interface between the LDSBus host and the LDSBus devices. Each LDSBus HVT-Junction can connect up to four LDSBus Devices. Additional LDSBus HVT-Junctions may be daisy chained to add more LDSBus devices to the bus.

1.1 Features

- Connects LDSBus devices to LDSBus Host and supports daisy chain connections through the RJ45 LDSBus ports
- Supports four LDSBus device connections through the RJ11/RJ12 LDSU ports
- Built-in DC-DC converter for stepping down the LDSBus +24VDC supply to +5VDC for LDSU ports
- Built-in Voltage protection for RJ45 ports
- Built-in Overcurrent protection
- Flush mount and DIN Rail mounting options
- Operating temperature range : 0°C to +70°C

2 Part Numbers

Part#	Naming
LA010101A	LDSBus HVT-Junction
LA120101A	LDSBus DIN Rail Mount Set

Table of Contents

3 Product Specifications

Features	Interface	RS485
	LED Indicator	Red LED (Power On)
	Mounting	Flush Mount
		DIN Rail Mount
Power	Input Voltage	24V DC Bus Power
	Input Max. Current	200mA
	Output Voltage	5V DC (LDSU Ports)
	Output Max. Current	800mA
Physical Characteristics	Color	White
	Housing	Polycarbonate
	Dimensions	L117.6mm x W42.9mm x H29.7mm
Environmental Limits	Operating Temperature	0 to 70°C
	Storage Temperature	-20 to 85°C
	Ambient Relative Humidity	5 to 95% (non-condensing)
Package Contents	Device	1x LDSBus HVT-Junction
	Installation (Optional)	1x DIN Rail Bracket Set

Table 1 - LDSBus HVT Junction Specifications

4 Hardware Features

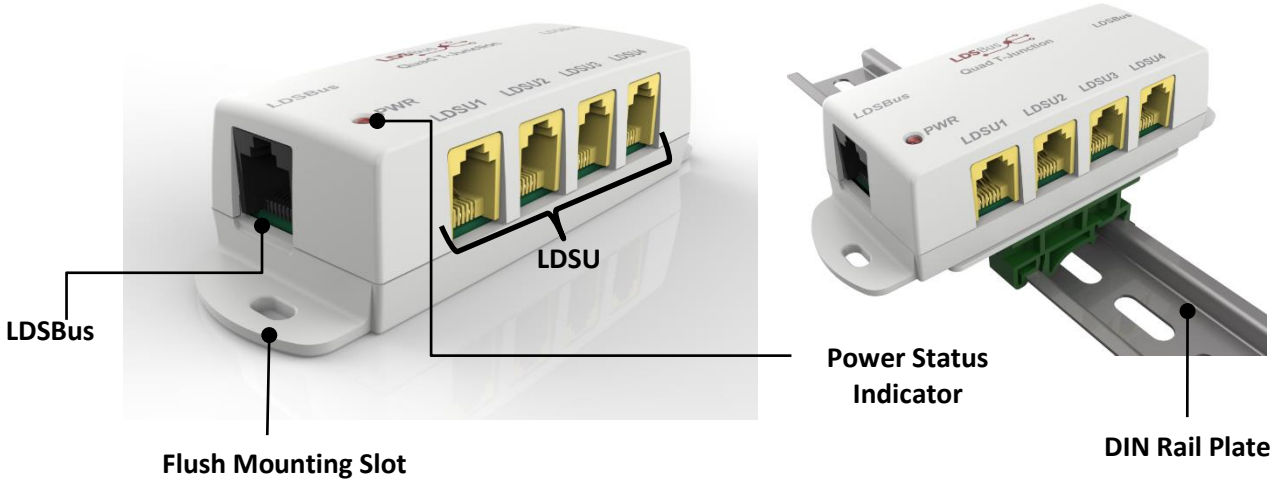


Figure 1 - LDSBus HVT-Junction Flush Mount / DIN Rail Plate – Hardware Features

5 Connection Diagram

Figure 2 illustrates the connection of the LDSBus HVT-Junction (LDSBus Device) in an LDSBus system.

Setup Instructions:

1. Connect the first LDSBus HVT-Junction to any of the LDSBus Host Systems using a RJ45 (CAT5e) cable.

2. Connect the configured LDSBus Device(s) to the LDSBus HVT-Junction as shown in Figure 2.

3. If there is more than one LDSBus HVT-Junction, chain them together as shown in Figure 2.

Please visit http://bit.ly/ldsbus-resources to view the full application, setup and installation guides.

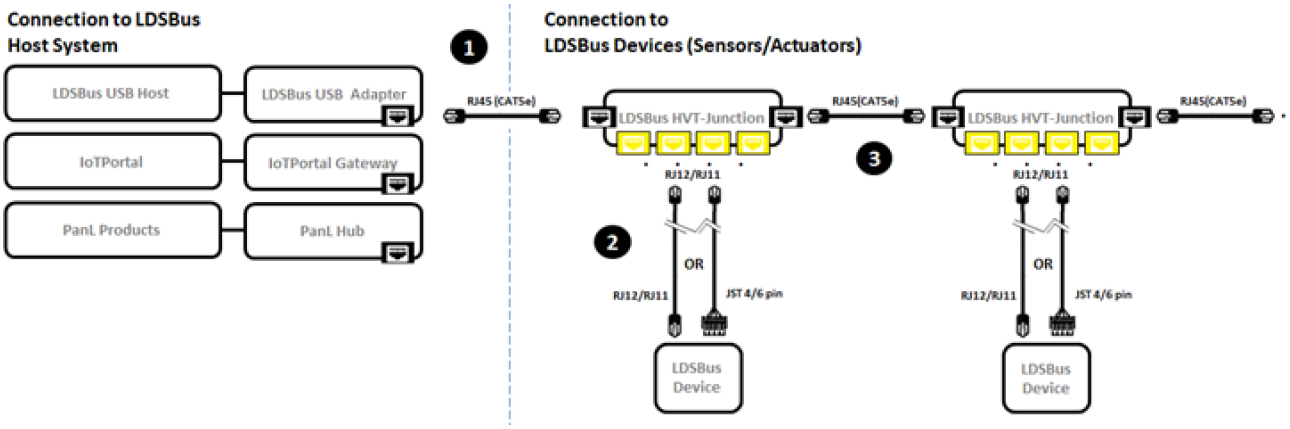


Figure 2 - LDS Bus – HVT Junction in LDSBus System – Connection Diagram

6 Mounting Options

6.1 Flush Mount

The LDSBus HVT Junction can be flush mounted directly on a wall or any flat surface using 2 M3.5*16mm (thread) screws.

Figure 3 - LDSBus HVT-Junction - Flush Mounting

6.2 DIN Rail Mount

The LDSBus HVT Junction can be mounted on a DIN Rail using the LDSBus DIN Rail Mount set. This set is optional and includes the bracket and mounting screws.

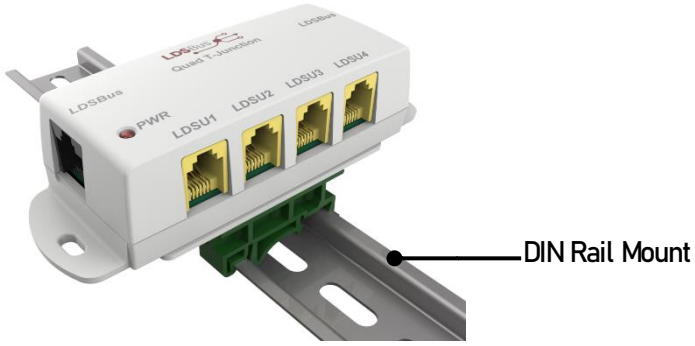


Figure 4 - LDSBus HVT-Junction - DIN Rail Mount

7 Mechanical Dimension

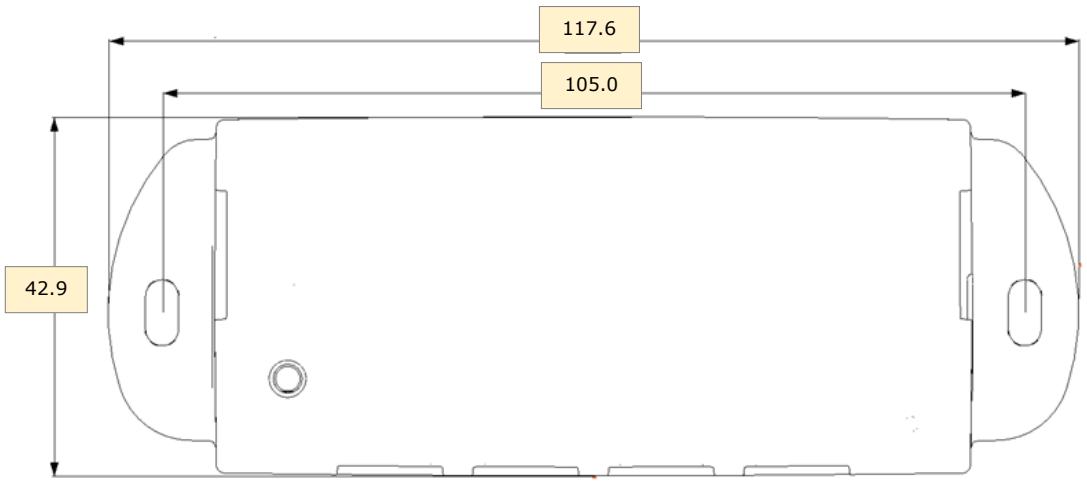


Figure 5 - LDSBus HVT-Junction Dimension – Top View

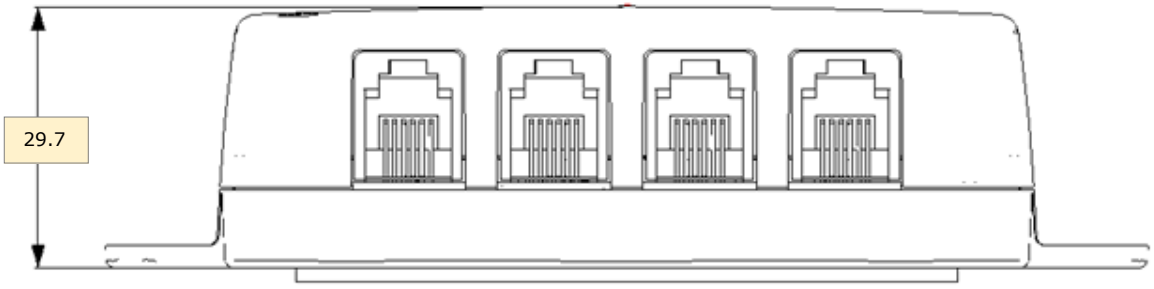


Figure 6 - LDSBus HVT-Junction Dimension – Side View

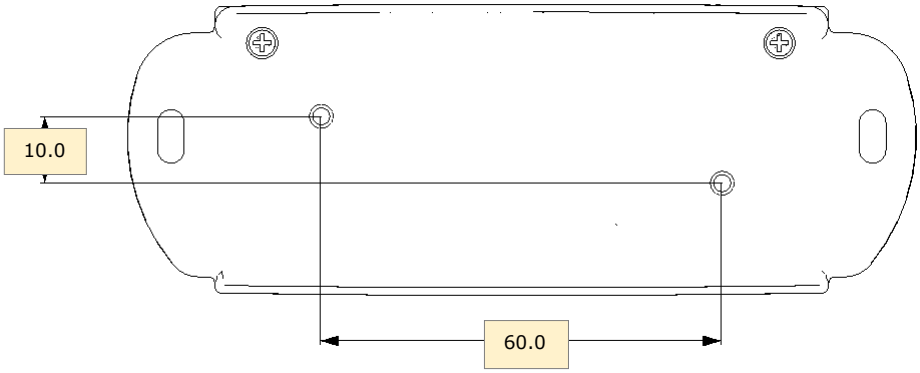


Figure 7 - LDSBus HVT-Junction Dimension – Bottom View

Note: All dimensions are in millimetres.

8 Contact Information

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Please visit the Sales Network page of the BRT Systems Web site for the contact details of our distributor(s) and sales representative(s) in your country.

Appendix A - References

Document References

BRTSYS_AN_001_LDSBus_Configuration_Utility_User_Guide

BRTSYS_API_001_LDSBus_Python_SDK_Guide

HVT Junction Quick Start Guide

Acronyms and Abbreviations

Terms	Description
DC	Direct Current
LED	Light Emitting Diode
IoT	Internet of Things
HVT-Junction	High Voltage T-Junction

Appendix B - List of Figures and Tables

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List of Tables

Appendix C – Revision History

Document Title: LDSBus HVT - Junction Datasheet

Document Reference No.: BRTSYS_000002

Clearance No.: BRTSYS#003

Product Page: https://brtsys.com/ldsbus/

Document Feedback: Send Feedback

Revision	Changes	Date
Version 1.0	Initial Release	27-10-2021
Version 1.1	Updated release under BRT Systems	14-09-2022