DST-HUB

Motionnet & High Speed Link Extension Modules

Features

- **Support both Motionnet and HSL buses**
- **Supports T bracing connection and star connection (subsystem concept)**
- **One input port with 2 output segment ports for HSL system**
- **One input port with 3 output segment ports for Motionnet system**
- **Switch setting selectable transmission speeds: 3/6/12 Mb/s for HSL system**
- **Switch setting selectable transmission speeds: 5/10/15/20 Mb/s for Motionnet system**
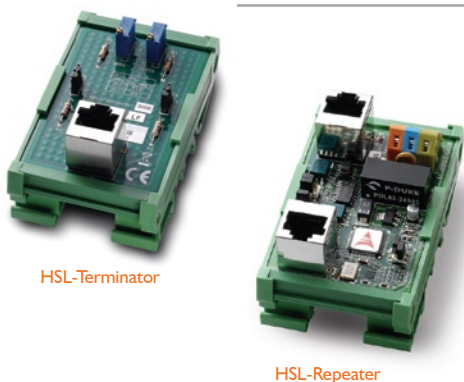- **RJ-45 jack for easy installation**
- **24 V$_{DC}$ input**

Specifications

■ Transmission Mode	Full/Half duplex
■ Transmission Speed	3/6/12 Mbps selectable, 6 Mbps is default setting
■ Operation Temperature	0°C to +60°C (32°F to 140°F)
■ Power Requirement	+24 V$_{DC}$ (±10%)
■ Input Channel	1 for HSL, 1 for Motionnet
■ Output Channel	2 for HSL, 3 for Motionnet

General Introduction

The DST-HUB is a subsystem of both Motionnet & HSL, offering one-to three-port transmission for Motionnet system & one to two port transmissions for HSL system respectively. The DST-HUB provides a wide choice of flexible connection topologies, including T, star & conventional daisy-chain types, regularizing and strengthening communication signals to reduce noise effect.

HSL-Repeater / HSL-Terminator
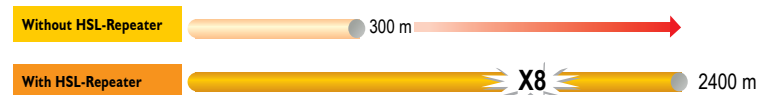
High Speed Link Extension Modules

HSL-Terminator

HSL-Repeater

Features

- **Linking configurations: Master to HUB, HUB to HUB, HUB to Slave**
- **Supports T-bracing connection and star connection (subsystem concept)**
- **One input port with 3 output segment ports**
- **Jumper selectable transmission speeds: 3/6/12 Mb/s**
- **Jumper-selectable full and half duplex transmission mode**
- **RJ-45 jack for easy installation**
- **24 V$_{DC}$ input**

The extension possibility of HSL system by using HSL-Repeater

Without HSL-Repeater — 300 m

With HSL-Repeater — X8 — 2400 m

	Without Repeater	Repeater X 1	Repeater X 2	Repeater X 5	Repeater X 7
12 Mbps	100 m	200 m	300 m	600 m	800 m
6 Mbps	200 m	400 m	600 m	1200 m	1600 m
3 Mbps	300 m	600 m	900 m	1800 m	2400 m

General Introduction

The HSL-Repeater is an HSL subsystem which can extend connection distances in automation applications, especially in manufacturing environments. One HSL bus can connect up to seven repeater modules with cable lengths up to 2.4 km at a 3Mb/s transmission rate. Effectively, all 2016 points can be monitored within 4 ms via HSL bus from up to 2.4 km in length to provide fast, time-deterministic, and robust configurations over traditional RS-485 devices.

The HSL-Terminator ensures communication stability, providing an adjustable resistor allowing impedance of the wiring of the HSL system or Motionnet system to be adjusted to ensure transmission quality.