

General Features

duagon's MVB diagnostic systems are designed for debugging MVB devices and networks. The diagnostic system is connected to a common PC. The user can operate the diagnostic system in two operation modes:

In the MONITOR mode, the diagnostic system provides a complete set of commands to investigate MVB devices on the bus. Several interactive commands are available on a PC terminal console:

- Read and write MVB process data
- MVB network investigation with device status poll and scanning of all device ports
- Self-learning BA (BA configuration is learned by listening on the MVB bus)

In the SERVER mode, the user applications can be programmed and executed on the PC which is connected to the diagnostic system. A full featured MVB programming library is included in the diagnostic system to control a whole MVB network. The diagnostic system can be used with a common PC:

- The D442 is connected through USB to the PC
- The D412 is connected through RS232 to the PC
- The D213 is a PCI card to be used in a standard PCI slot

The MVB interface of the D442/D412/D213 complies to the TCN standard IEC61375. It supports both wire based physical layers being on the market today (selectable by switch):

- ESD+
- EMD

Key Benefits

- All in one diagnostic system
- MVB receiver insensitivity for improved noise immunity (selectable via order option)
- Supports MVB type "EMD" and "ESD +"
- Future MVB diagnostic application on demand
- LabVIEW drivers for D442/D412/D213 can be ordered on request at duagon
- Complete set of commands to investigate MVB devices on the bus
- Available for all wired based physical layers on the market today

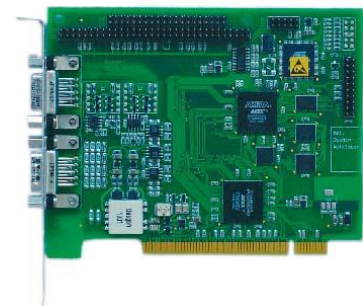
D442



D412



D213



Technical Data

D442

Supply Voltage	<ul style="list-style-type: none"> – USB Connector Type B – 5V
MVB Interface	<ul style="list-style-type: none"> – Supports MVB physical layers ESD+ and EMD – Two 9-pin D-Sub connectors – Galvanically insulated from all other circuitry – MVB type "optical glass fibre" on demand – Receiver insensitivity: 150mV or 350mV as defined by IEC61375 for improved noise immunity
PC Interface	<ul style="list-style-type: none"> – USB (FTDI)
Dimensions/Weight	<ul style="list-style-type: none"> – 103mm x 92.7mm x 34mm – Mass: approx. 335g – Stainless steel housing
Diagnostic/Functions with MVB Monitor	<ul style="list-style-type: none"> – Force MVB by read/write process data – MVB network investigation with device status poll and scanning of all device ports – MVB network management: supports MVB download of duagon devices – Self-learning bus administrator (BA configuration is learned by listening on MVB Bus)
Operating Conditions	<ul style="list-style-type: none"> – The D442 is designed for the use in laboratory only – The D442 does not support extended temperature range – The D442 does not necessarily meet special requirements for the use in train applications

D412

Supply Voltage	<ul style="list-style-type: none"> – 9V DC / 300mA (line adapter included)
MVB Interface	<ul style="list-style-type: none"> – Supports MVB physical layers ESD+ and EMD (selectable by switch) – Two-9pin D-Sub connectors – Galvanically insulated from all other circuitry
PC Interface	<ul style="list-style-type: none"> – RS232 (115kb) or USB (RS232 to USB adapter included)
Dimensions/Weight	<ul style="list-style-type: none"> – 103 x 93mm x 34mm – Mass: approx. 400g – Stainless steel housing
Diagnostic/Functions with MVB Monitor	<ul style="list-style-type: none"> – See D442
Operating Conditions	<ul style="list-style-type: none"> – See D442

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D213/213L

Supply Voltage	<ul style="list-style-type: none"> – 5V 	Dimensions/Weight	<ul style="list-style-type: none"> – 127mm x 148mm x 107mm – Mass: approx. 120g
MVB Interface	<ul style="list-style-type: none"> – MVB physical layers EMD or ESD+ as defined in TCN Standard enhanced by a galvanic insulation 	Diagnostic/Functions with MVB Monitor	<ul style="list-style-type: none"> – See D442
PC Interface	<ul style="list-style-type: none"> – 32-bit, 33MHz PCI interface with + 5.0V-signalling 	Operating Conditions	<ul style="list-style-type: none"> – See D442

D442 Order Code and HW Options

Product Type: **D442** - -

EXAMPLE:
D442-O-I3

MVB Supply

5V MVB Supply on D-Sub for OGF
-

Receiver Insensitivity

150mV (recommended)
350mV

Description of options

- Option-O This option provides the 5V/GND MVB supply on the MVB D-Sub connectors. The power will be drawn from the MVB-Supply of the built-in D013.
- Option-I3 If option -I3 is chosen, the receiver insensitivity will be set to 350mV. This is only recommended in harsh, noisy environments. Otherwise, when left empty the receiver insensitivity will be set to 150mV by default.

Related Documents

Data Sheet D442

d442_ds.pdf

MVB Monitor – User's Guide

mvb_mon.pdf

D412 Order Code and HW Options

ProductType: **D412**


Product Type

MONITOR+SERVER* **D412**

*MVB bus administrator is included in D412

Related Documents


Data Sheet D412

 d412_ds.pdf

SW Driver Kit NAVIGATOR

 navig_d412.zip

MVB Monitor User's Guide

 mvb_mon.pdf

D213 Order Code and HW Options

ProductType: **D213**

EXAMPLE:
D213 .T-P4

Product Type

MDFULL **D213L**
MONITOR+SERVER **D213**

MVB Type

EMD **.T**
ESD+ **.D**


PC/104 Connector

with **-P4**
without **<empty>**


MVB bus administrator is included in D213

Related Documents


Data Sheet D213

 d213_ds.pdf


SW Driver Kit MDFULL

 mdfull_d213.zip


SW Driver Kit NAVIGATOR

 navig_d213.zip

MVB Monitor User Guide

 mvb_mon.pdf

D113 PC/104 MVB Interface-Data Sheet

 D113_DS.pdf

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