DIGITAL INDUSTRIES SOFTWARE

Simcenter SCADAS Mobile and Lab Quad CAN bus interface module

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Product Information Sheet

Summary

About CAN-FD

The Controller Area Network with Flexible Data-rate (CAN-FD) is an extension to the original CAN bus protocol specified in ISO 11898-1. A message oriented serial bus system that is mostly used in vehicles for passing on and exchanging information on for instance engine control, transmission, braking etc. CAN FD was created to accommodate increases in bandwidth requirements within automotive networks.

CAN FD also allows for more storage capacity in the CAN-frame. While classic CAN has the capacity to hold 8 bytes of data within the CAN-frame, CAN FD can hold up to 64.

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BENEFITS

- Connect up to 4 independent CAN-FD buses with analog data
- Software controlled resampling for fully synchronous acquisition of CAN-FD signals

FEATURES

- Support of both Classic CAN and CAN-FD
- Bus speed and fault detection with colour coded LED indication on front-panel
- Full support of automotive and truck standards

In addition, CAN FD is compatible with existing CAN 2.0 networks, allowing the new protocol to function on the same network, since CAN FD has been estimated to transmit data up to 30 times faster than classic CAN.

CN4-II input module

The CN4-II input module for SCADAS Mobile and SCADAS Lab, accommodates four CAN-FD bus interfaces that are compatible with the ISO11898-1:2015 (CAN-FD) standard.

The CN4-II is compliant with the CAN 2.0A/B and CAN-FD message protocol which is widely accepted and used by most vehicle manufacturers, and also supports the SAE J1939 truck and bus standard.

The raw CAN data stream can be recorded and stored on the disc and it can be decoded later in Testlab. Only selected channels will be resampled during acquisition.

Input function
Quad CAN-FD bus

Input connectors
Two DB9 shielded connectors each supporting two CAN bus; pinning

according to the DS102 standard busses.

Input signal levels
Compliant with the ISO11898-1 ISO11898-2 and ISO11898-3 standards

Maximum input voltage
40 Vpk continuously

Maximum common mode voltage:
±5 V

Supply current
+15V – 75 mA

Resampling rate
Software selectable

Front panel indication:
Color coded LED per CAN input indicating either a high speed (blue) or a low speed (green) CAN connection. The appropriate LED will turn red in case of a communication problem.

Ordering information
Support of Simcenter SCADAS Frames and Modules may be restricted in specific Simcenter Testlab application workbooks.
Please check with your local representative for full details.
SCM-CN4-II: Simcenter SCADAS Mobile quad channel CAN-FD bus input module
SCL-CN4-II: Simcenter SCADAS Lab quad CAN-FD bus interface

Included accessories
Two Sub-D CAN 9 pin adapter cables (1x Sub-D to 2x Sub-D)