

1. CAN FD Extension Module

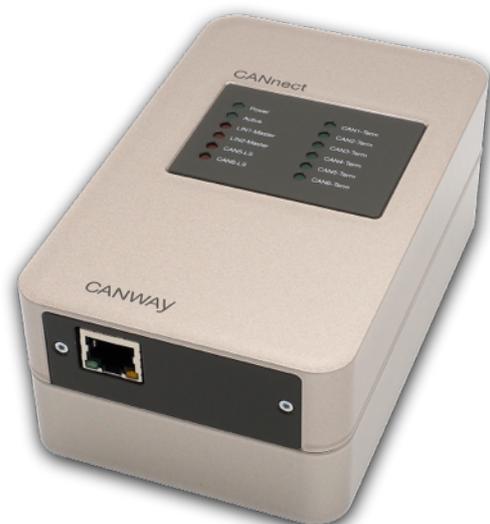
The new **CAN FD extension module** enhances the fieldbus gateway CANnect (for CAN, LIN and Ethernet) with the addition of high performance access to CAN FD networks. Based on cutting edge FPGA technology the extension module is equipped with four CAN FD interfaces. Utilizing CAN FD facilitates flexible data transmission rates (up to 8 Mbit/s) as well as significantly greater data volumes (up to 64 bytes) in comparison with classic CAN. A harmonious and complete system is created as soon as the extension module is connected to the CANnect base module. This combines proven technology with truly innovative developments. Thanks to the modular concept it is possible to upgrade CANnect base modules without any difficulty - including retrospectively. In addition to the supported bus systems numerous channels for classic measuring and control purposes are also provided: Analog-digital inputs as well as digital-analog inputs and outputs.



In combination with the CANnect gateway base module there are numerous options available to configure, parameterize and implement functions: Links to bus, message and signal levels, periodic and event-triggered message suppression, restbus simulation, offset and factor settings, logic and arithmetic calculation factors and much more. It is possible to configure all settings using the configuration software (CW-921) - **without abstract programming**. The real-time capable gateway then functions in standalone mode. In summary, the CANnect can be described as a multifunctional gateway tool that is specifically designed to fulfill complex requirements in the field of E/E testing and integration.

A summary of the essential features of the CAN FD extension module:

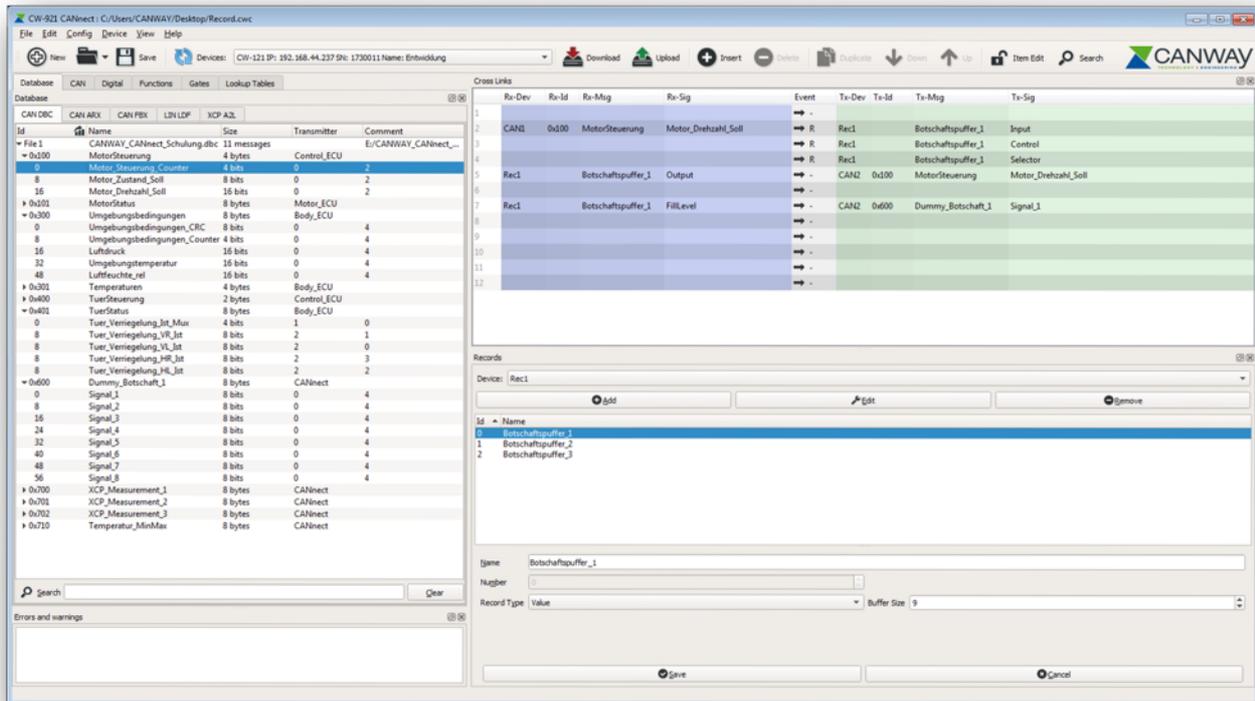
- ▶ **4 CAN FD interfaces** (up to 8 Mbit/s and 64 Byte payload supports ISO 11898-1:2015)
- ▶ **Simulates ECUs and sensors**
- ▶ **Standalone operation in real time**
- ▶ **Restbus simulation** (including cyclic transmission and user configurable message payload)
- ▶ **Diverse I/O channels** (ADC, DAC, DO)
 - ▶ 4 x analog-digital converter (12 bit)
 - ▶ 4 x digital-analog converter (14 bit)
 - ▶ 7 x digital out



2. New functions in the software update V1.6.3.0

2.1. Records (ring buffer)

With the latest software update V1.6.3.0 to upgrade the free configuration software CW-921 it is now possible to dynamically save CAN messages in a message buffer – the so-called **records function**. With the records function it is now possible to temporarily buffer messages and signals, which can then be issued dynamically on any specified bus as required. The desired size of the buffer is easily defined in the user interface. It is also possible to determine and output the current fill level during the propagation time.

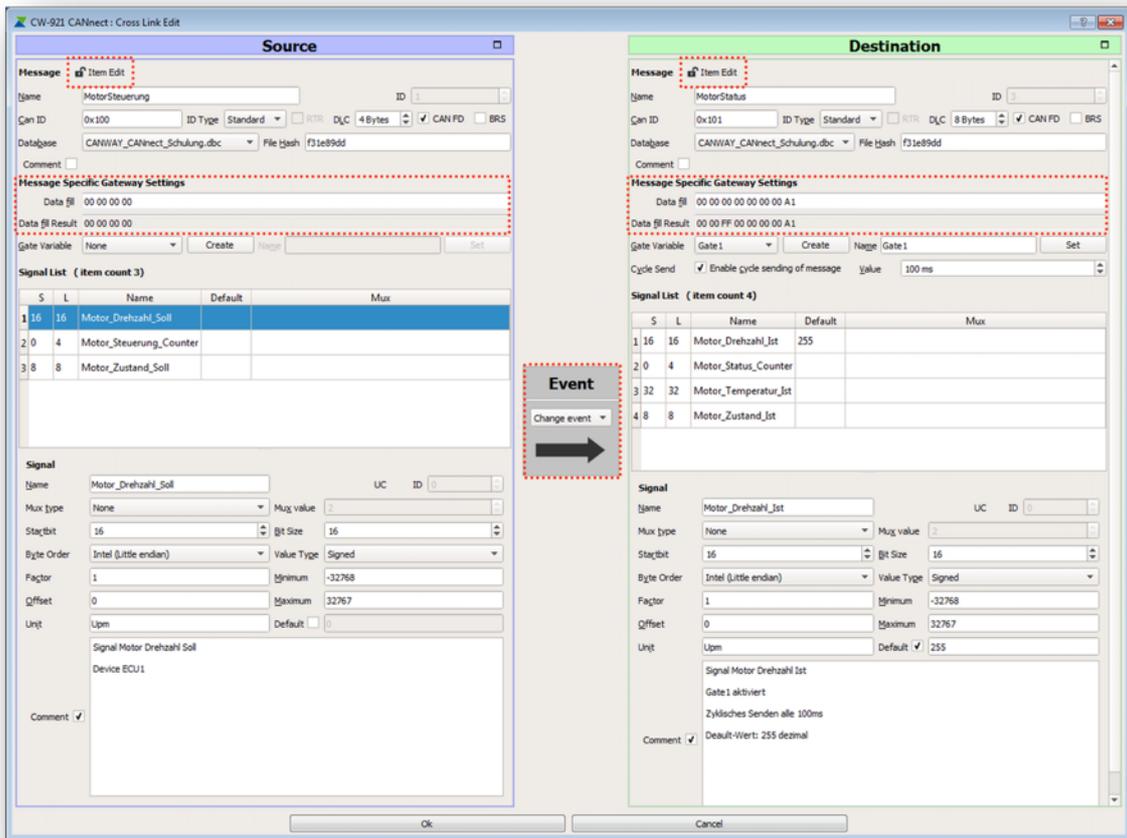


2.2. Change Event, Data fill Result and Item Edit

Helpful, innovative functions have also been implemented in the Cross Link edit dialog box (low level access); for instance, these include an additional event type – the **Change Event**. This event type makes it possible to forward incoming messages and signals depending on a change to a value.

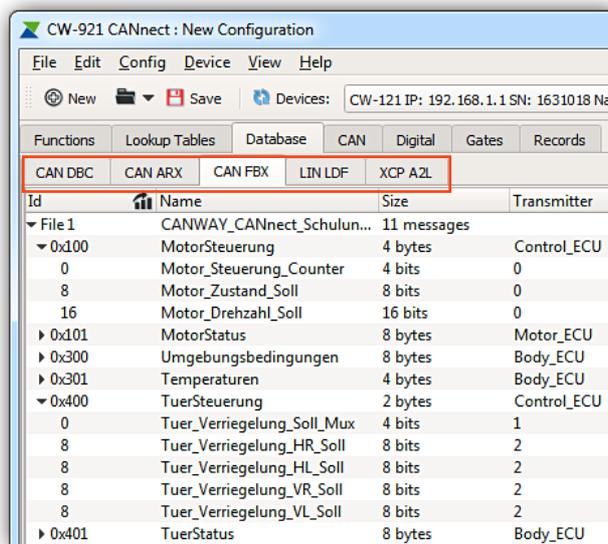
As is already known from previous software versions it is possible to cause artificially generated messages to be transmitted cyclically – eg. for a restbus simulation. It is possible to define the configuration of a message payload to cover an entire message (data fill) as well as for a single signal (default). To allow the user to retain oversight at all times over what is finally issued as a message an additional display field has been added to the user interface – **Data fill result**.

The new release also enhances security to prevent third parties making unauthorized changes. Simply clicking the new button **Item Edit** (padlock icon) locks created low-level configurations.



2.1. Fibex Import

The software release V1.6.3.0 now also includes the Fibex format to extend the import function for bus description files. The following description formats continue to be supported: DBC, ARXML, LDF and A2L. As soon as a description file is read in, it is extremely easy to map the messages/signals it contains – via drag-and-drop – or to use them in functions.



3. Usability Improvements

With the goal of setting the highest standards for intuitive usability further improvements have been made to enhance the user-friendly environment:

- ▶ Move items within the Cross Link list via drag-and-drop (for examples, messages, signals, functions)
- ▶ Improvements to validation options
 - ▶ Test created configuration for logic consistency
 - ▶ Test for invalid CAN identifiers and cycle times
 - ▶ Test for set event allocations
- ▶ New module tab for CAN-/LIN buses, gates, records, lookup tables, analog and digital inputs
- ▶ Improved positioning of the Cross Link dialog box

Note: Regular software updates are offered free of charge to our customers who conclude a software maintenance agreement (**option maintenance**); the software updates are immediately available for use without restriction.*

**Do you have any questions, suggestions or feedback about CANnect Gateway?
Your opinion is very important to us!**

Simply write to us at: mail@canway.de

* Does not apply in the event that using additional hardware options or any of the following software options: XCPonCAN, formula are required. New features concerning these options must be purchased in advance or retroactively in order to use them. Current limitations for CAN FD extension: Fixed bitrate 2 Mbit/s for CAN FD, 500 kbit/s for CAN HS, Sample Point 80% and no support for 29 bit CAN identifier.