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# CAN - LIN Bus option for DAS1600 - DAS800 - DAS801

**The solution for testing, analysing, monitoring application with CAN 2.0 A, CAN 2.0 B, CAN FD and LIN bus.**

CAN option for DAS800/801 and DAS1600 is the right solution to analyse your entire industrial network. Fully compatible with CAN, CAN FD and LIN.

**Hardware filtering of CAN frames**

Filter the frames seen by the device via the identifier of these (up to 4 filters per channel). Filtering includes an acknowledgment of the frame that is sent over the network. A silent mode is available to disable any communication from the recorder, and to view only the frames.

**Displaying frames on bus**

The devices display all the frames on the CAN and LIN BUS. Displaying 1000 frames and filtering according to the ID and / or the channel.

**Saving frames on CSV format**

When on recording mode, all the frames are saved on a .csv file. The .csv file is exportable and readable in Excel © spreadsheet. Triggering the recording in synchronization of a REC file.

**Conversion to analogue channel**

Conversion of CAN or LIN frame into an analogue signal up to 18 simultaneous channels up to 16-bit.

The conversion is personalizable or it is possible to use the default conversion. By converting the CAN or LIN frame to an analogue signal, it is possible to access all the classic functions of the recorder: trigger, mathematical functions, alarms.

**Sending frames on the CAN bus**

Sending frames on the CAN network via the recorder (4 programmable output frames with periodic sending from 1ms to 1s).

Interrogate an element of your CAN network: temperature request to a sensor, state request of a sensor, ...

Simulate your CAN network via the recorder: replace a sensor and simulate A1it.

**CAN DataBase File Management**

Import a CAN DataBase file into the device to automatically convert frames into an analogue signal.

**CAN capabilities**

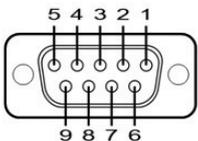
Can type	CAN 2.0 A/B, CAN-FD
Nominal rate	10kbps to 1Mbps
Max. baud rate (FD mode)	1Mbps to 8Mbps
Waveform conversion	Up to 18 channels
	Sampling rate : 100kHz (10µs)
Periodic frame output (sending CAN frames)	Data type supported : 1 to 16 bit
	1 per BUS
	Up to 64 data bytes
CAN real time frame viewer	Period from 1ms to 1s
	Up to 100 frames in real-time on screen
CAN filters / masks	Up to 4 frames based on frame ID
CAN recording	CAN waveforms in .REC format
	CAN frames in .CSV format
CAN DBC	Convert into a waveform / signals rule ( will be implemented v1.1)

**LIN capabilities**

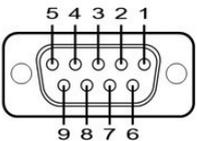
LIN Protocol	1.3 to 2.2
Mode	Slave only (listener)
Bit rate	1kbps to 20 kbps
Waveform conversion	Up to 18 channels
	Sampling rate : 100kHz (10µs)
LIN real time frame viewer	Data type supported : 1 to 16 bit
	Up to 100 frames in real-time on screen
LIN recording	LIN waveforms in .REC format
	LIN frames in .CSV format



CAN 9 pin D-SUB



D-SUB 9-pin	Signal	Description
1	NC	
2	CAN_L	CAN Low (dominant low)
3	CAN_GND	CAN Ground
4	NC	
5	NC	
6	PS_GND	External power supply ground
7	CAN_H	CAN High (dominant high)
8	NC	
9	PS_V+	External power supply voltage



LIN 9 pin D-SUB

D-SUB 9-pin	Signal	Description
1	NC	
2	NC	
3	LIN_GND	LIN Ground
4	NC	
5	NC	
6	LIN_GND	LIN Ground
7	LIN_BUS	LIN Data bus
8	NC	
9	LIN_Vbat	LIN Battery Voltage





# CAN - LIN Bus option for DAS1600 - DAS800 - DAS801

## Technical features

### CAN / CAN FD SPECIFICATIONS

Number of input ports	2
I/O connector	9 pin male D-SUB
Isolation	Isolated (port to port and port to recorder) Between port to earth ground : + 60VDC, CAT I
Input impedance (CAN_H to CAN_L)	Onboard termination enabled : 120 Ω ± 4% Onboard termination disabled : > 12 kΩ (transceiver differential input resistance)
Transceiver	MCP2557FD (ISO 11898)
Max. baud rate	CAN HS : 1Mbps CAN FD : 8Mbps Protocols : ISO 11898-1:2015 or non-ISO
Max voltage between CAN_H or CAN_L and CAN_GND	±31VDC
Max voltage between CAN_H & CAN_L	-5VDC to 10VDC

### External power supply for CAN BUS

Number of power supplies per port	1
I/O connector	9 pin male D-SUB
Isolation	Isolated (port to port and port to recorder) Between port to earth ground : + 60VDC, CAT I
Switchable	Off, 5V, 12V
Voltage / Current	5V, up to 600mA 12V, up to 300mA
Voltage accuracy	5V±5% 12V±5%
Protection	Overvoltage : 30VDC Overcurrent / reverse voltage : Fuse / -30VDC Overtemperature : automatic

### LIN SPECIFICATIONS

Number of input ports	2
I/O connector	9 pin male D-SUB
Isolation	Isolated (port to port and port to recorder) Between port to earth ground : + 60VDC, CAT I
Transceiver	TJA1028T
Max. baud rate	20kbps
LIN battery voltage	+5VDC to +28VDC
Absolute maximum continuous LIN battery voltage	+33VDC
Typical power consumption on Vbat (Vbat = 12V)	Standby : 11mA Normal : 20mA
Absolute maximum continuous voltage LIN slave termination	-40VDC to +40VDC 30kΩ ± 10kΩ

### General specifications

This board is a factory option of the SEFRAM DAS800 and DAS1600 recorders. Environmental conditions are defined by the recorder. Please check the general specifications of your recorder.



FT Option BUS CAN-LIN A00 - Specifications can be updated without notice



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## For assistance and ordering

