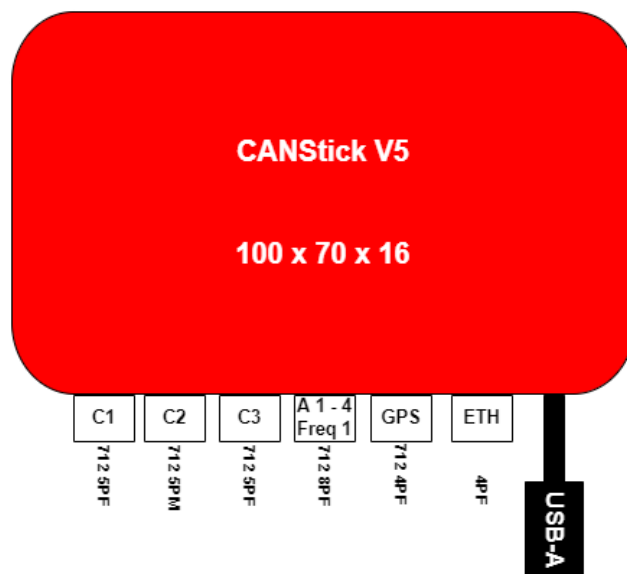


## LG-CANStick\_V5-000

## USB Stick Logger with 4x Analog



### Key Features

- Sticklogging features
  - Stores data directly on 1000 GB USB 3.0 Stick with > 600 kByte/s
  - Supports USB Stick hot swap
  - Optional CAN-Streamlogging: Create measurements with "unlimited" number of OFFLINE CAN channels & Streamreplay (*OPT-008*)
  
- CAN-bus features
  - 3 CAN lines up to 5 Mbit/s each (one line can be used for CAN-FD)
  - 32 ONLINE CAN channels can be recorded and send to other CAN-devices with sampling rate up to 200 Hz each (online CAN-DB/DBC-file decoding)
    - Optional up to 128 ONLINE CAN channels (*OPT-001*)
    - Optional CAN channels sampling rate of up to 2000 Hz (*OPT-002 & OPT-003*)
  - Optional with CAN/CAN-FD: XCP/CCP option with "Listen only" Mode (*OPT-005*)
  
- 4 analog input channels – up to 1000 Hz sampling rate each
  - 1 Input can be switched to a Hybrid Input
  - Optional increased sampling rate of analog inputs (*OPT-010*)
  
- 2 frequency input channels (up to 50kHz)
- 32 / 64 Math (CALC) channels for online calculation with > 8 MFlops
- GPS/GNSS data via CAN and Serial (RTK ready)
- Optional with built-in Wi-Fi module for wireless 2D WinIt communication and for RealDash interface (*OPT-013*)
- Optional Ethernet connection (*OPT-011*)

### Available options (all options can be combined freely!)

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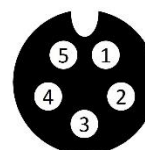
- OPT-000      Serial GPS/GNSS mouse connectivity
- OPT-001      Additional 32 ONLINE CAN channels (max. total 128 CAN channel)
- OPT-002      Increased max. sampling rate of **1000 Hz** (for **all** channels)
- OPT-003      Increased max. sampling rate of **2000 Hz** (for **all** channels)
- OPT-004      Full ONLINE channel Routing/Interface
- OPT-005      CAN/CAN-FD/Ethernet - CCP/XCP Protocol (Online Decoding)
- OPT-008      **CAN-Streamlogging**: Create measurements with "unlimited" number of OFFLINE CAN channels & Streamreply
- OPT-010      Increased sampling rate of **analog** channels to 16000 Hz each
- OPT-011      Ethernet connection
- OPT-012      Waterproof USB Stick incl. Connectors/connector cables
- OPT-013      Built-in Wi-Fi module for wireless 2D WinIt communication and for RealDash interface

### Technical specifications

<b>CAN characteristics</b>		<b>Mechanical characteristics</b>	
ONLINE CAN channels	32 (up to 128)	Housing Material	Aluminum
CAN Lines	2	Dimensions	mm 100x 70x 16
CAN powered	yes	Weight (cable included)	g 125
Baud rate	kBd 125 / 250 / 500 / 1000 / 2000	CAN 1/2 Interface	Binder 712 5PF
Sampling rate CAN channels optional	Hz up to 200 Hz up to 2000	Cable USB Stick	USB Type A, socket
		Length	mm 200
		Analog/Frequency Input 1/2	Binder 712, 8PF
		Auxiliary Connector	Binder 712, 8PF
<b>Storage characteristics</b>		<b>Electrical characteristics</b>	
USB supports 2.0/3.0	GB 1000	Supply voltage	V 6 to 18
Max USB Stick size format	xFAT32	Current consumption @12V	mA 95
Max block size	GB 2		
<b>Analog input channels</b>		<b>Operation mode status indicator</b>	
Single ended inputs	4	LED green/red blinking	
Analog Input Filter (6dB)	Hz 4400		
Resolution	bit 16		
Input voltage range	V 0 to 5		
Internal sampling rate analog channels	Hz 32000	<b>Environmental data</b>	
recording rate analog input channels	Hz Up to 16000	Protection class	IP67
		Ambient operating range	°C -20 to +75
		Humidity	% 5 to 95
<b>Frequency input channels</b>		<b>Vibration resistance</b>	
Inputs	2	Shock	G 40
max. frequency	kHz <50	During time period of	ms 10
		Vibration tested at	G 12
		Measured with	Hz 1000
		<b>Ordering information</b>	
		LG-CANStick_V5-000	

**Connector layout**
**Connector type**
**CAN 1, Binder 712, 5PF**

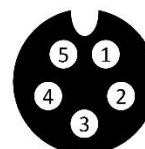
Pin	Name	Description
1	CAN 1 H	CAN 1 high
2	CAN 1 L	CAN 1 low
3	GND	Ground
4	n.c.	Not connected
5	Vext	Power (6 to 18V)



front view

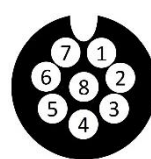
**CAN 2, Binder 712, 5PF**

Pin	Name	Description
1	CAN 2 H	CAN 2 high
2	CAN 2 L	CAN 2 low
3	GND	Ground
4	n.c.	Not connected
5	Vext	Power (6 to 18V)



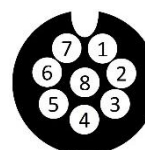
front view

**Analog/Frequency inputs, Binder 712, 8PF**

Ain 1-4 + Freq 1			Ain 5-8 + Freq 2		 front view
Pin	Name	Description	Name	Description	
1	VCC	5V Sensor supply	VCC	5V Sensor supply	
2	AGND	Analog ground	AGND	Analog ground	
3	FREQ 1	Frequency input 1	FREQ 2	Frequency input 2	
4	+12V	12V Sensor supply	+12V	12V Sensor supply	
5	AIN 1	Analog input 1	AIN 5	Analog input 5	
6	AIN 2	Analog input 2	AIN 6	Analog input 6	
7	AIN 3	Analog input 3	AIN 7	Analog input 7	
8	AIN 4	Analog input 4	AIN 8	Analog input 8	

**Auxiliary, Binder 712, 8PF**

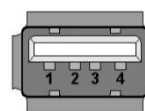
Pin	Name	Description
1	VCC	+5V Sensor supply
2	GND	Ground
3	n.c.	Not connected
4	+12V	+12V Sensor supply
5	LAP	Lap Trigger input
6	KL15	KL15 input
7	Dout	Digital output
8	Vext	Power (6 to 18V)



front view

**USB, Type A, socket**

Pin	Name	Description	Color
1	VCC	USB Power supply +5V	red
2	Data -	Data line -	white
3	Data +	Data line +	green
4	GND	Ground	black



front view



Connector and cable length can be modified on customer request!

**CAN DB decoding**

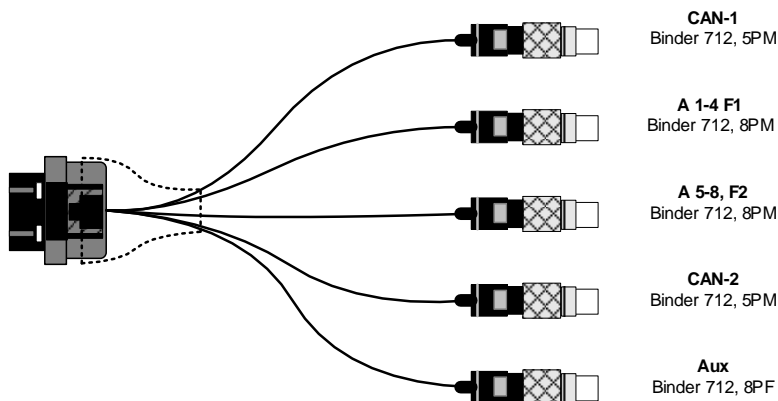
- Every Setting change in the module creates automatically a CAN DB in  
**C:/ProgramData/Race20xx/System/CAN-DB**

## Accessories

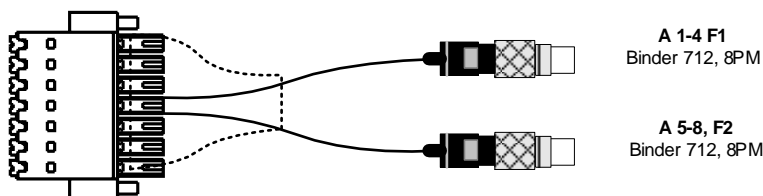
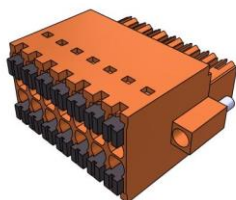
- 4x Analog, 1x Frequency Breakout Box  
WB-2miniA\_D-000



- µCAN Converter Loom  
2x Binder 712 5PM + 3 Binder 712 8PM → Tyco 34PM



- Analog / Frequency Breakout Loom  
2 Binder 712 8PM → 14 Pole Push-In Connector



- Engineering Breakout Loom  
3 Binder 712 8PM → 18 Pole Push-In Connector

