



## Key Features

- Sticklogging features
  - Stores data directly on 512 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
  - 2 CAN lines up to 2 Mbit/s each
  - 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*)
- 1 frequency input channels (up to 50kHz)
- 24 Math (CALC) channels for online calculation
- GPS/GNSS data via CAN and Serial (RTK ready)
- Optional with built-in 6DoF-IMU (*OPT-009*)
- Also available as Sticklogger V4 hardware with built-in Wi-Fi module for wireless 2D WinLT communication and for RealDash interface (see [datasheet](#) of Sticklogger V4W)

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

OPT-000	<u>Serial</u> GPS/GNSS mouse connectivity		
OPT-001	<u>Additional</u> 32 ONLINE CAN channels (max. <u>total</u> 128 CAN channel)		
OPT-002	Increased max. sampling rate of <b>1000 Hz</b> (for <b>all</b> channels)		
OPT-003	Increased max. sampling rate of <b>2000 Hz</b> (for <b>all</b> channels)		
OPT-004	Full ONLINE channel Routing/Interface		
OPT-005	CAN - CCP/XCP Protocol (Online Decoding)		
OPT-008	<b>CAN-Streamlogging:</b> Create measurements with "unlimited" number of OFFLINE CAN channels & Streamreplay		
OPT-009-A	Integrated 6 DoF IMU with individual range selection for Acc ( $\pm 2/4/8/16$ G) and Gyros ( $\pm 250/500/1000/2000$ °/s)		
OPT-009-B	Integrated 6 DoF IMU with individual range selection for Acc ( $\pm 4/8/16/30$ G) and Gyros ( $\pm 500/1000/2000/4000$ °/s)		
OPT-010	Increased sampling rate of <b>analog</b> channels to 16000 Hz each		
OPT-012	Waterproof USB Stick incl. Connectors/connector cables		

**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 70 x 50 x 15
CAN powered		yes	Weight (cable included)	g 115
Baud rate	kBd	125 / 250 / 500 / 1000 / 2000	CAN 1 Interface	Binder 712 5PF
Sampling rate CAN channels optional	Hz	up to 200	CAN 2 Interface	Binder 712 5PM
	Hz	up to 1000	Cable USB Stick	USB Type A, socket
			Length	mm 200
<b>Storage characteristics</b>			Analog/Frequency Input	Binder 712, 8PF
Max USB Stick size format	USB GB	supports 2.0/3.0 512	Serial GPS Input	Binder 712, 4PF
Max block size	GB	xFAT32 2		
<b>Analog input channels</b>			<b>Electrical characteristics</b>	
Single ended inputs		4	Supply voltage	V 6 to 18
Analog Input Filter (6dB)	Hz	4400	Current consumption @ 12V	mA 95
Resolution	bit	16		
Input voltage range	V	0 to 5	<b>Operation mode status indicator</b>	
Internal sampling rate analog channels	Hz	32000	LED green/red blinking	
recording rate analog inputs	Hz	up to 16000	<b>Environmental data</b>	
<b>Frequency input channels</b>			Protection class	IP67
max. frequency at Freq 1	kHz	<50	Ambient operating range	°C -20 to +75
max. frequency Hybrid	kHz	<4	Humidity	% 5 to 95
<b>3 Axis acceleration (optional)</b>			<b>Vibration resistance</b>	
Range switchable with 3 axes	G	$\pm 2/\pm 4/\pm 8/\pm 16/\pm 30$	Shock	G 40
Error of linearity	FS	<1 %	During time period of	ms 10
Lowpass filter (programmable)	Hz	5 to 250	Vibration tested at	G 12
Sampling rate	Hz	1000	Measured with	Hz 1000
<b>3 Axis yaw-rate (optional)</b>			<b>Ordering information</b>	
Sensitivity	%/s	$\pm 250/\pm 500/\pm 1000/\pm 2000/\pm 4000$	LG-CANStick2C_V4-000	
Error for linearity	FS	<1%		
Lowpass filter (programmable)	Hz	5 to 250		
Sampling rate	Hz	1000		



## USB Stick Compatibility

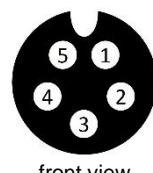
Proper functioning of the logger is only guaranteed with USB Sticks sold by 2D!

### Connector layout

### Connector type

#### CAN 1, Binder 712, 5PF

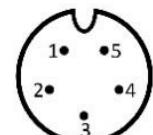
Pin	Name	Description
1	CAN 1 H	CAN 1 high
2	CAN 1 L	CAN 1 low
3	GND	Ground
4	n.c.	Not connected
5	Vext / Supply	Power (6 to18V)



front view

#### CAN 2, Binder 712, 5PM

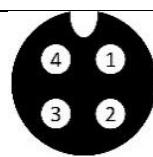
Pin	Name	Description
1	CAN 2 H	CAN 2 high
2	CAN 2 L	CAN 2 low
3	GND	Ground
4	KL15	KL15/switched power
5	Vext / Supply	Power (6 to18V)



front view

#### GPS, Binder 712, 4PF

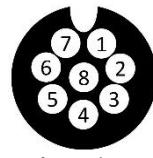
Pin	Name	Description
1	TxD	Transmit Data
2	RxD	Receive Data
3	GND	Ground
4	VCC	GPS Power Supply +5V



front view

#### Analog / Frequency input, Binder 712, 8PF

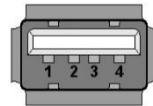
Pin	Name	Description
1	VCC	+5V Sensor supply
2	GND	Ground
3	FREQ1	Frequency input 1
4	+12V	+12V Sensor supply
5	AIN1	Analog input 1
6	AIN2	Analog input 2
7	AIN3	Analog input 3 / Hybrid Input
8	AIN4	Analog input 4



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!