LG-CANStick2C_V4-000   **Industrial USB Stick CAN Logger**

Key Features

- ➤ Sticklogging features
    - o Stores data directly on 512 GB USB 3.0 Stick with > 600 kByte/s
    - o Supports USB Stick hot swap
    - o Optional CAN-Streamlogging: Create measurements with "unlimited" number of OFFLINE CAN channels & Streamreplay (*OPT-008*)

- ➤ CAN-bus features
    - o 2 CAN lines up to 2 Mbit/s each
    - o 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*)
    - o 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
    - o 1 Input can be switched to a Hybrid Input
    - o 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 WinIt 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 **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 - CCP/XCP Protocol (Online Decoding)
OPT-008	**CAN-Streamlogging**: Create measurements with "unlimited" number of OFFLINE CAN channels & Streamreplay
OPT-009-A	Integrated 6 DoF IMU with individual range selection for Acc (±2/4/8/16 G) and Gyros (±250/500/1000/2000 °/s)
OPT-009-B	Integrated 6 DoF IMU with individual range selection for Acc (±4/8/16/30 G) and Gyros (±500/1000/2000/4000 °/s)
OPT-010	Increased sampling rate of **analog** channels to 16000 Hz each
OPT-012	Waterproof USB Stick incl. Connectors/connector cables

Technical specifications

CAN characteristics

ONLINE CAN channels		32 (up to 128)
CAN Lines		2
CAN powered		yes
Baud rate	kBd	125 / 250 / 500 / 1000 / 2000
Sampling rate CAN channels	Hz	up to 200
optional	Hz	up to 1000

Storage characteristics

	USB	supports 2.0/3.0
Max USB Stick size	GB	512
format		xFAT32
Max block size	GB	2

Analog input channels

Single ended inputs		4
Analog Input Filter (6dB)	Hz	4400
Resolution	bit	16
Input voltage range	V	0 to 5
Internal sampling rate analog channels	Hz	32000
recording rate analog inputs	Hz	up to 16000

Frequency input channels

max. frequency at Freq 1	kHz	<50
max. frequency Hybrid	kHz	<4

3 Axis acceleration (optional)

Range switchable with 3 axes	G	±2/±4/±8/±16/±30
Error of linearity	FS	<1 %
Lowpass filter (programmable)	Hz	5 to 250
Sampling rate	Hz	1000

3 Axis yaw-rate (optional)

Sensitivity	°/s	±250/±500/±1000/±2000/±4000
Error for linearity	FS	<1%
Lowpass filter (programmable)	Hz	5 to 250
Sampling rate	Hz	1000

Mechanical characteristics

Housing Material		Aluminum
Dimensions	mm	70 x 50 x 15
Weight (cable included)	g	115
CAN 1 Interface		Binder 712 5PF
CAN 2 Interface		Binder 712 5PM
Cable USB Stick		USB Type A, socket
Length	mm	200
Analog/Frequency Input		Binder 712, 8PF
Serial GPS Input		Binder 712, 4PF

Electrical characteristics

Supply voltage	V	6 to 18
Current consumption @12V	mA	95

Operation mode status indicator

LED green/red blinking		

Environmental data

Protection class		IP67
Ambient operating range	°C	-20 to +75
Humidity	%	5 to 95

Vibration resistance

Shock	G	40
During time period of	ms	10
Vibration tested at	G	12
Measured with	Hz	1000

Ordering information

LG-CANStick2C_V4-000

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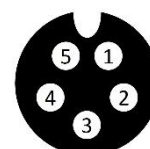
Proper functioning of the logger is only guaranteed with USB Sticks sold by 2D!

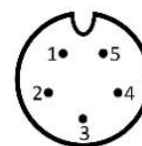## Connector layout   Connector type

CAN 1, Binder 712, 5PF

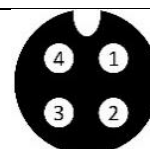| Pin	Name	Description
1	CAN 1 H	CAN 1 high
2	CAN 1 L	CAN 1 low
3	GND	Ground
4	n.c.	Not connected
5	Vext / Supply	Power (6 to18V)

front view

CAN 2, Binder 712, 5PM

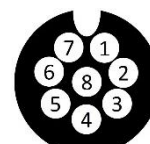| Pin	Name	Description
1	CAN 2 H	CAN 2 high
2	CAN 2 L	CAN 2 low
3	GND	Ground
4	KL15	KL15/switched power
5	Vext / Supply	Power (6 to18V)

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
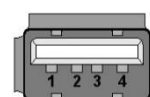
Analog / Frequency input, Binder 712, 8PF

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!