
LG-CANStick2C_V2-000**USB Stick CAN Logger**

**Key Features**

- Sticklogging features
 - Stores data directly on 128 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*)

- 2 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*)

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/CAN-FD/Ethernet - 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 ($\pm 2/4/8/16$ 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 analog channels to 16000 Hz each
OPT-012	Waterproof USB Stick incl. Connectors/connector cables

CAN DB decoding

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



USB Stick Compatibility

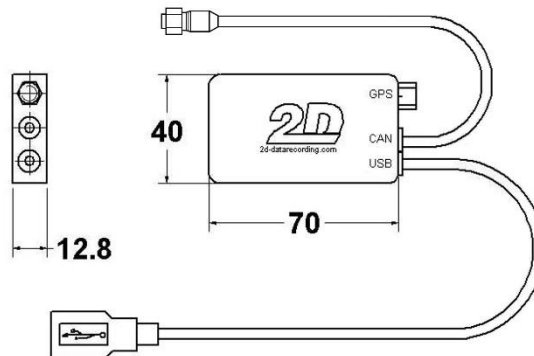
Proper functioning of the logger is only guaranteed with USB Sticks sold by 2D!

Technical specifications

CAN characteristics ONLINE CAN channels optional CAN Lines CAN powered Baud rate Sampling rate CAN channels optional		32 Up to 128 2 yes kBd 125 /250 /500 /1000/2000 Hz 200 Hz Up to 2000	Mechanical characteristics Aluminum housing Dimensions Weight Cable CAN line Wire cross section Type Length Connector type CAN Cable USB line Length Connector type Connection GPS/serial Connector type		mm 70x 40x13 g 105 12 x AWG24 Metrofunk mm 200 Deutsch IMC 200, 12PM mm 500 USB Type A, socket Binder 712, 4 PF
Storage characteristics Max USB Stick size format Max block size		USB supports 2.0/3.0 GB 128 x FAT32 GB 2	Electrical characteristics Supply voltage Current consumption w/o. GPS Current consumption with GPS		V 5 to 30 mA <140 mA <180
Analog input channels Single ended inputs Analog Input Filter (6dB) Resolution Input voltage range Internal sampling rate analog channels Sampling rate analog input channels		2 Hz 4400 bit 16 V 0 to 5 Hz 32000 Hz Up to 16000	Operation mode status indicator LED green/red blinking		
3 Axis acceleration (optional) Range switchable with 3 axes Error of linearity Lowpass filter (programmable) Sampling rate		G $\pm 2/\pm 4/\pm 8/\pm 16/\pm 30$ FS <1 % Hz 5 to 250 Hz 1000	Environmental data Protection class Ambient operating range Humidity		IP67 °C -20 to +75 % 5 to 95
3 Axis yaw-rate (optional) Sensitivity Error for linearity Lowpass filter (programmable) Sampling rate		°/s $\pm 250/\pm 500/\pm 1000/ \pm 2000/\pm 4000$ FS <1% Hz 5 to 250 Hz 1000	Vibration resistance Shock During time period of Vibration tested at Measured with		G 40 ms 10 G 12 Hz 1000
		Ordering information LG-CANStick_2C_V2-000			

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Dimensions

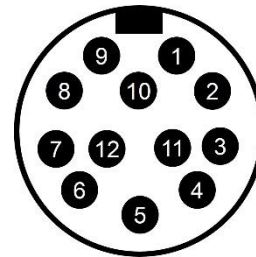


Connector layout

Connector type

CAN-1 line, Deutsch IMC 200, 12PM

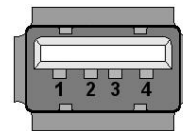
Pin	Name	Description	Color
1	Vext	Power supply 8-14V	red
2	BGND	Board ground	black
3	CAN-1 Hi	CAN-1 High	white
4	CAN-1 Lo	CAN-1 Low	green
5	Lap out	LAP out signal	grey
6	KL15	KL15/switched power	blue
7	CAN-2 Hi	CAN-2 High	yellow
8	CAN-2 Lo	CAN-2 Low	brown
9	AIN2	Analog 2	white/black
10	AIN1	Analog 1	white/brown
11	+12V	+12V/VBat out	orange
12	+5V	+5V sensor supply	purple



front view

USB, Type A socket

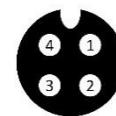
Pin	Name	Description	Color
1	VCC	Power supply +5V	red
2	Data -	Data line -	white
3	Data +	Data line +	green
4	GND	Ground	black



front view

GPS/Serial, Binder 712, 4PF

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



front view



Connector and cable length can be modified on customer request!