

LG-CANStick2C_V4W-000

Industrial USB Stick WiFi CAN Logger



Key Features

- **Built-in Wi-Fi** module for wireless 2D WinIt communication and for RealDash interface
- 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*)



Available options (all options can be combined freely!)

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 - 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

Technical specifications

CAN characteristics		Mechanical characteristics	
ONLINE CAN channels		Housing Material	Aluminum
CAN Lines	32 (up to 128)	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	Hz up to 200	CAN 2 Interface	Binder 712 5PM
optional	Hz up to 1000	Cable USB Stick	USB Type A, socket
		Length	mm 200
Storage characteristics	USB supports 2.0/3.0	Analog/Frequency Input	Binder 712, 8PF
Max USB Stick size	GB 512	Serial GPS Input	Binder 712, 4PF
format	xFAT32		
Max block size	GB 2	Electrical characteristics	
		Supply voltage	V 6 to 18
Analog input channels		Current consumption @12V	mA 120
Single ended inputs	4		
Analog Input Filter (6dB)	Hz 4400	Operation mode status indicator	
Resolution	bit 16	LED green/red blinking	
Input voltage range	V 0 to 5		
Internal sampling rate analog channels	Hz 32000	Environmental data	
recording rate analog inputs	Hz up to 16000	Protection class	IP67
		Ambient operating range	°C -20 to +75
Frequency input channels		Humidity	% 5 to 95
max. frequency at Freq 1	kHz <50		
max. frequency Hybrid	kHz <4	Vibration resistance	
		Shock	G 40
3 Axis acceleration (optional)		During time period of	ms 10
Range switchable with 3 axes	G $\pm 2/\pm 4/\pm 8/\pm 16/\pm 30$	Vibration tested at	G 12
Error of linearity	FS <1 %	Measured with	Hz 1000
Lowpass filter (programmable)	Hz 5 to 250		
Sampling rate	Hz 1000	Ordering information	
		LG-CANStick2C_V4-000	
3 Axis yaw-rate (optional)			
Sensitivity	°/s $\pm 250/\pm 500/\pm 1000/\pm 2000/\pm 4000$		
Error for linearity	FS <1%		
Lowpass filter (programmable)	Hz 5 to 250		
Sampling rate	Hz 1000		

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USB Stick Compatibility

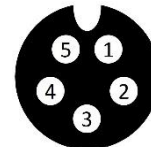
Proper functioning of the logger is only guaranteed with USB Sticks sold by 2D!

Connector layout

Connector type

CAN 1, Binder 712, 5PF

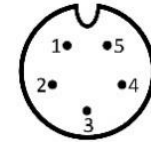
Pin	Name	Description
1	CAN 1 H	CAN 1 high
2	CAN 1 L	CAN 1 low
3	GND	Ground
4	n.c.	Not connected
5	Vext	Power (6 to 18V)



front view

CAN 2, Binder 712, 5PM

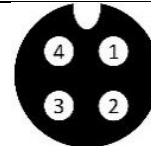
Pin	Name	Description
1	CAN 2 H	CAN 2 high
2	CAN 2 L	CAN 2 low
3	GND	Ground
4	KL15	KL15/switched power
5	Vext	Power (6 to 18V)



front view

GPS, Binder 712, 4PF

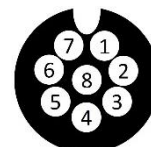
Pin	Name	Description
1	TxD	Transmit Data
2	RxD	Receive Data
3	GND	Ground
4	VCC	GPS Power Supply +5V



front view

Analog / Frequency input, Binder 712, 8PF

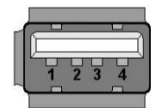
Pin	Name	Description
1	VCC	+5V Sensor supply
2	GND	Ground
3	FREQ1	Frequency input 1
4	+12V	+12V Sensor supply
5	AIN1	Analog input 1
6	AIN2	Analog input 2
7	AIN3	Analog input 3 / Hybrid Input
8	AIN4	Analog input 4



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!