

**LG-µCAN09\_M2-000****Moto2-compatible Datalogger****Module****CAN/GPS connector****TYCO 34PM****Key Features:**

- *Datalogger with 43 channels:*
  - 10 CAN
  - 8 Analog input
  - 3 Digital input
  - 1 Lap input
  - 1 K-Line input
  - 3 Acceleration (internal sensor)
  - 2 internal channels (Vext/CPU-Temp)
  - 15 GPS channels
- *Full 2D CAN-Interface*
- *Integrated 3 Axis accelerometers ± 6G*
- *External power supply 12-20V*
- *Storage rate predefined*
- *Fixed channel setting*
- *Compact and lightweight (150g) housing*
- *Easy connection of sensor signals through single AMP connector (= Interface Unit)*

## LG-µCAN09\_M2-000

## Moto2-compatible Datalogger

### Technical specifications

<b>Logging (predefined)</b>					
Channels		43			
Recording time		predefined			
Storage rate	Hz	Up to 400			
Internal sampling rate	kHz	6.4			
<b>Analog input channels</b>					
Single ended inputs (AIN1. to AIN8)			8		
<ul style="list-style-type: none"> <li>• With pullup@5V AIN1I2I5I6</li> <li>• Without pullup AIN3I4I7I8</li> </ul>			(predefined)		
• Input voltage range	V	0-5			
• Input filter					
• Cut-off frequency (-3dB)	Hz	100			
• Damping (per decade)	dB	12			
<b>Digital input channels</b>					
Input capture: DIN1 - DIN3		3			
DIN1 - DIN3 with pullup@5V		✓			
Max input frequency	kHz	5			
DIN1/DIN3 (V_front, RPMSprkt)		Lo	Hi		
Threshold (level1)	V	1.7	3.4		
Threshold (level2)	V	0.4	1.0		
Cut-off frequency (-3dB)	kHz	10			
DIN2 (RPM)					
Threshold (level1)	V	3.5	8.3		
Threshold (level2)	V	1.7	3.4		
Cut-off frequency (-3dB)	kHz	4.8			
LAP			LAP/SEC		
With pullup@5V		✓			
LAP	V	0			
SEC	V	2.5			
Cut-off frequency (-3dB)	Hz	100			
Resolution	mV	5			
<b>Environmental characteristics</b>					
Operating temperature	°C	0 - 75			
Humidity	%	0 to 95			
Sealing class	IP	66			
Vibration resistance					
Shock	G	40			
During time period of	ms	10			
Vibration tested @	G	12			
Measured with	Hz	1000			
<b>Ordering information</b>					
For ordering this product use 2D article number LG-µCAN09_M2-000					

### Internal channels (resolution)

3 axis acceleration	[m/s <sup>2</sup> ]	0.02
VextMsg	[V]	0.01
CPUtempMsg	[°C]	0.1

### Electrical characteristics

Power supply	[V]	12-20
Or USB Bus powered(5V) as well*		
Current consumption:		
@ 12V w/o GPS w/o Sensors	[mA]	100
@ 12V w GPS w/o Sensors	[mA]	130
@ 5V w/o GPS and Sensors	[mA]	230

### Sensor supplying max. values

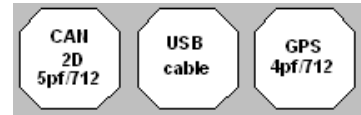
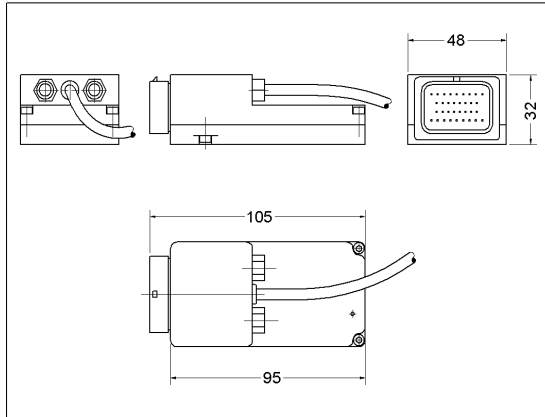
Max. current output(+12V)	[mA]	200
Max current output(+5V)	[mA]	100
Σ max. output	[W]	2.5

**\*If the logger is only supplied by USB-power during setup or download you have to ensure whether your USB-port can supply a minimum output current of 700mA or you have to disconnect all sensors from the logger.**

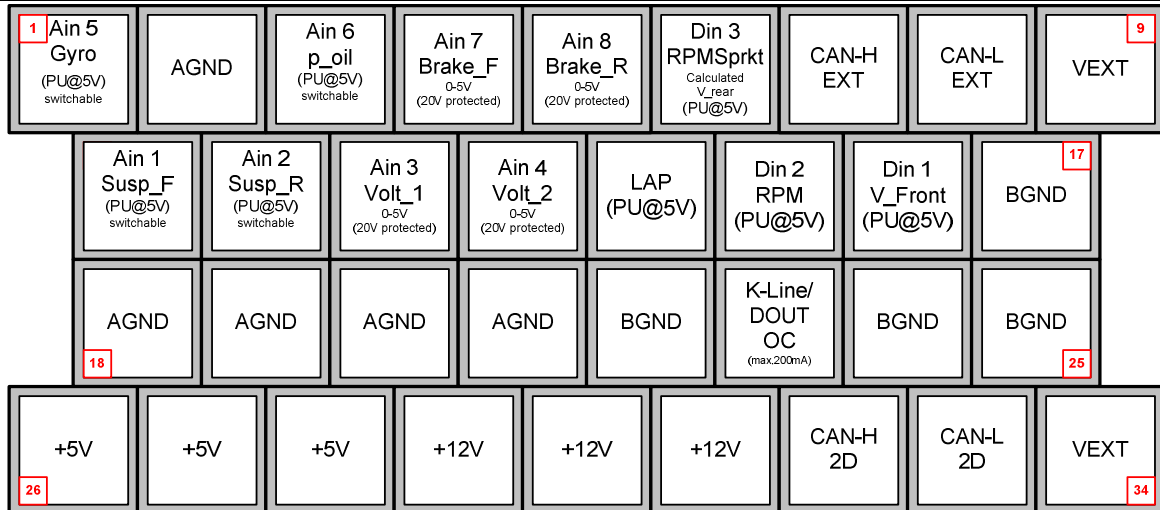
# LG-µCAN09\_M2-000

# Moto2-compatible Datalogger

## Dimensions / Weight



## Connector Layout (34 pin AMP connector)



(rear view: Tyco pin lead in)

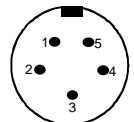
## Connector types



Plug at module: mating plug



Binder 712, 5PF (front side)  
Plug at module



Binder 712, 5PM (front side)  
mating plug

CAN-line	PIN	Name	Description	Color
	1	CAN H	Can Bus High	white
	2	CAN L	Can Bus Low	green
	3	GND	Ground	black
	4	n.c.	Not connected	-
	5	Vext	Power IN (4-18V)	red

The specifications on this document are subject to change at 2D decision. 2D assumes no responsibility for any claims or damages arising out of the use of this document, or from the use of modules based on this document, including but not limited to claims or damages based on infringement of patents, copyrights or other intellectual property rights.

2D Debus & Diebold Meßsysteme GmbH  
<http://www.2D-datarecording.com>  
<http://www.2D-Kit-System.com>  
[mail@2D-datarecording.com](mailto:mail@2D-datarecording.com)