LG-µCAN11_Pro-000   **Advanced Datalogger and Interface Unit**

CAN/GPS connector

TYCO 34PM

Module

Key Features:

➢ *Datalogger with 97 channels:*
  o *64 CAN*
  o *8 Analog input*
  o *3 Digital input*
  o *1 Lap input*
  o *1 Digital output*
  o *3 Acceleration (internal sensor)*
  o *2 internal channels (Vext/CPU-Temp)*
  o *15 GPS channels*
➢ *2 completely independent CAN lines with full CAN Routing*
➢ *GPS laptime (standard)*
➢ *Integrated 3 Axis accelerometers ± 6G*
➢ *External power supply 12-20V*
➢ *Storage rate up to 400 Hz / channel*
➢ *All settings individually selectable (each channel)*
➢ *Compact and lightweight (150g) housing*
➢ *Easy connection of sensor signals through single AMP connector (= Interface Unit)*

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Technical Specifications

Logging (predefined)

Channels		97
Memory	GB	2
Storage rate	Hz	Max. 400/Ch
Internal sampling rate	kHz	6.4

CAN lines(factory default)

• 2D	In-/Output	
• EXT	Input	
CAN channels		64
Speed	kBaud	125 - 1000
CAN-line termination switchable		✓(off/120Ω)
CAN identifiers	unlimited	
Identifiers CAN 2.0A(base frame)	bit	11
Identifiers CAN 2.0B(extended frame)	bit	29

Analog input channels

Single ended inputs (AIN1. to AIN8)		8
• With pullup@5V AIN1|2|5|6		
• Without pullup AIN3|4|7|8		
• Resolution	Bit	14
• Input voltage range	V	0-5
• Input filter		
• Cut-off frequency (-3dB)	Hz	100
• Damping (per decade)	dB	12

Digital input channels

		Lo	Hi
Input capture: DIN1 - DIN3		3	
DIN1 - DIN3 with pullup@5V		✓	
Max input frequency	kHz	10	
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			
With pullup@5V		✓	
Cut-off frequency (-3dB)	Hz	100	
Resolution	mV	5	
Trigger threshold programmable		✓	

Digital output channel

Digital output (with open collector)		1
Full protected		✓
Sink current (up to)	mA	200

Internal channels (resolution)

3 axis acceleration	[m/s^2]	0.02
VextMsg	[V]	0.01
CPUTempMsg	[℃]	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]	90
@12V w GPS w/o Sensors	[mA]	120
@5V w/o GPS and Sensors	[mA]	350

Sensor supplying max. values

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

Environmental characteristics

Operating temperature	℃	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

Ordering information

For ordering this product use 2D
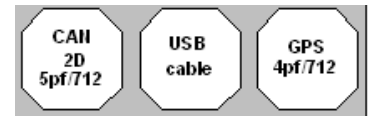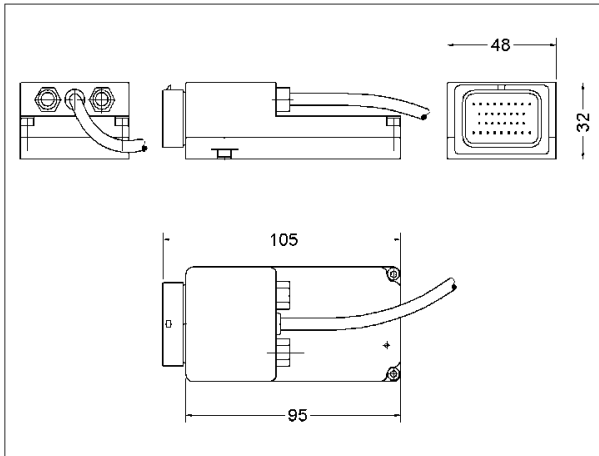article number LG-µCAN11_Pro-000

*If the logger is only supplied by USB-power during setup or download all analog, digital and GPS input channels are switched off to ensure no damage is done to USB port of PC due to overload.

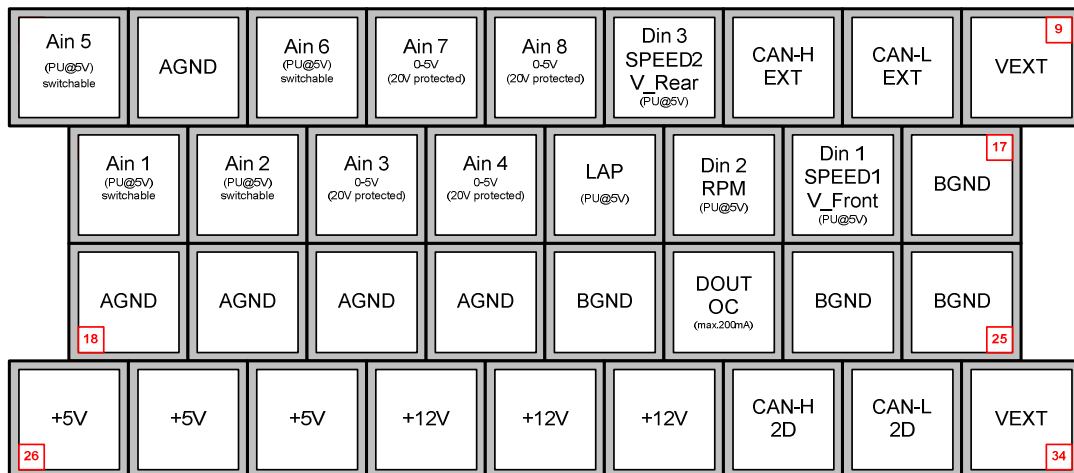On power up the logger sends automatically a CAN message on CAN 2D, ID 0x01 at baud rate 1M.

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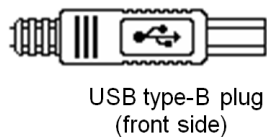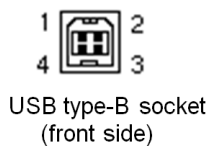
Dimensions

Connector Layout (34 pin AMP connector)

Ain 5 (PU@5V) switchable	AGND	Ain 6 (PU@5V) switchable	Ain 7 0-5V (20V protected)	Ain 8 0-5V (20V protected)	Din 3 SPEED2 V_Rear (PU@5V)	CAN-H EXT	CAN-L EXT	VEXT (9)
Ain 1 (PU@5V) switchable	Ain 2 (PU@5V) switchable	Ain 3 0-5V (20V protected)	Ain 4 0-5V (20V protected)	LAP (PU@5V)	Din 2 RPM (PU@5V)	Din 1 SPEED1 V_Front (PU@5V)	BGND (17)
AGND (18)	AGND	AGND	AGND	BGND	DOUT OC (max.200mA)	BGND	BGND (25)
+5V (26)	+5V	+5V	+12V	+12V	+12V	CAN-H 2D	CAN-L 2D	VEXT (34)

(Rear view: Tyco pin lead in)

Connector type

USB type-B socket (front side)

USB type-B plug (front side)

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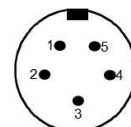
Binder 712, 5PM (front side) mating plug

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