2D Debus & Diebold Meßsysteme GmbH, Alte Karlsruher Str. 8, D-76227 Karlsruhe
Tel.: +49(0)721 94485-0 **Fax.:** +49(0)721 94485-29 **Mail:** mail@2d-datarecording.com

Module

CAN/GPS connector

TYCO 34PM

Key Features:

- *Datalogger with 97 channels:*
  - *64 CAN*
  - *8 Analog input*
  - *4 Digital input*
  - *1 Lap input*
  - *1 Digital output*
  - *3 axis accelerometer build in*
  - *2 system channels (supply voltage and module temperature)*
  - *15 GPS channels*
- *2 completely independent CAN lines with full CAN Routing*
- *GPS laptime (standard)*
- *Integrated 3 Axis accelerometers ± 6G*
- *External power supply 8-20V*
- *Storage rate up to 800 Hz / channel*
- *All channels individual programmable*
- *Compact, rigid and lightweight (150g) aluminium housing*
- *Easy connection of sensor signals through single AMP connector (= Interface Unit)*

2D Debus & Diebold Meßsysteme GmbH, Alte Karlsruher Str. 8, D-76227 Karlsruhe
Tel.: +49(0)721 94485-0 **Fax.:** +49(0)721 94485-29 **Mail:** mail@2d-datarecording.com

LG-µCAN11_Eng-000 — Advanced Datalogger and Interface Unit

Technical Specifications

Logging (predefined)			
Channels		97	
Memory	GB	2	
Storage rate	Hz	Max. 800/Ch	
Internal sampling rate on analog channels	kHz	6.4	
CAN lines(factory default)			
• 2D		In-/Output	
• EXT		Input	
CAN channels		64	
Speed		125/ 250/ 500/ 1000	
CAN-line termination switchable		✓(off/120Ω)	
Recordable 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		4	(AIN 1I2I5I6)
Without pullup		4	(AIN 3I4I7I8)
Resolution	Bit	16	
Input voltage range	V	0-5	
Input filter			
Cut-off frequency (-3dB)	Hz	100	
Damping (per decade)	dB	12	
Digital input channels			
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/s²]	0.02
VextMsg	[V]	0.01
CPUTempMsg	[℃]	0.1
Electrical characteristics		
Power supply	[V]	8-20
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
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_Eng-000

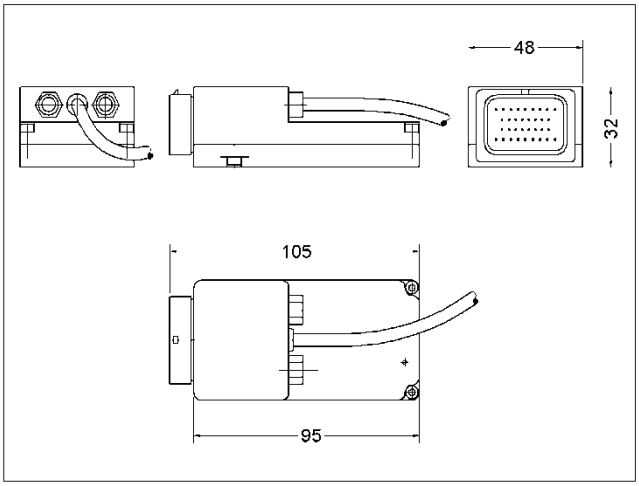
*If the logger is only supplied by USB-power during setup or download you have to ensure whether your USB-port can supply a minimum output current of 700mA or you have to disconnect all sensors from the logger.

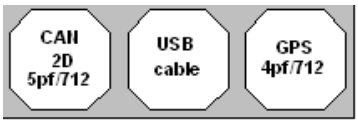
On power up the logger sends automatically a CAN message on CAN 2D, ID 0x01 at baud rate 1M.

2D Debus & Diebold Meßsysteme GmbH, Alte Karlsruher Str. 8, D-76227 Karlsruhe
Tel.: +49(0)721 94485-0 **Fax.:** +49(0)721 94485-29 **Mail:** mail@2d-datarecording.com

LG-µCAN11_Eng-000 — Advanced Datalogger and Interface Unit

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

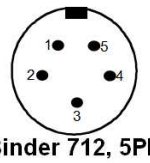
(rear view: Tyco pin lead in)

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