

A-CAN DG

Analog To Can Converter
8 Analog + 2 Digital Inputs

SN: _____ Software version: _____

Texys sensors are designed for data recording. If the user wants to include this sensor in a close loop system or active control, he must assume all responsibility.

Analog Inputs	Range	0 to 5	Volts
	16 bits Resolution	0.076	mV/bit
	Pull up to 5V	1	MOhm
Digital Inputs	Square wave Level	0 to 5 or NPN open Collector	V
	Pull up to 5V	10	KOhms
	Max Frequency *	8	KHz
	Tops	1 to 100	Tops/rev
Wheel Speed	Range	0 to 500 0 to 500	Kmh Mph
	Circumference	300 to 5000	mm
	Wheel tops/rev.	1 to 100	Top/rev
	Resolution	0.01 0.01	Kmh/bit Mph/bit
Engine Revs	Range	0 to 50000	Rpm
	Engine tops/rev.	1 to 100	Top/rev
	Resolution	1	Rpm/bit
Analog sampling and speed calculation		200	Hz
CAN bus2.0A		120Ω, not installed (on demand)	
Output Data		16 bits per channel	
Parameters		Identifiers, Baud rate, Frequency Digital Inputs	
Baud rate		125k to 1Mbps	
Frequency		1Hz to 200Hz, request mode	
Supply Voltage		6 to 16	V
Supply Current		25	mA
Dimensions		40x36x13	mm
Material		Plastic	
Weight		30	g
Protection		IP64	
Vibration test		20Gpp 5'	
Shock		500	G
Operating Temp		-20 to +80	°C
Storage Temp		-40 to +80	°C

* check max frequency for digital inputs as below:

Ex: 8000 rpm with 48 tops/rev
8000/60*48 = 6.4 KHz

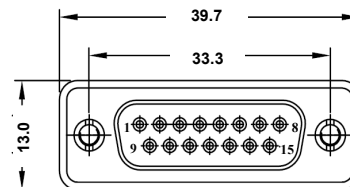
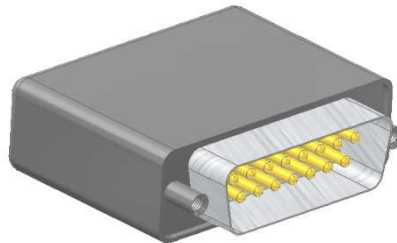
360km/h with 2m wheel circumference and 100 tops/rev
360/3.6 /2 *100 = 5 KHz

Setup for A-CAN DG dongle

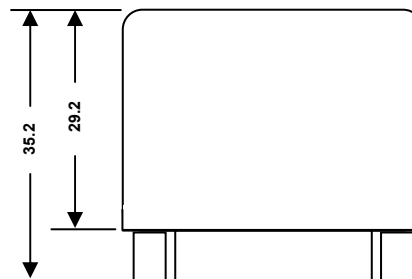
Identifiers	Tx1	
	Tx2	
	Tx3	
	Rx	
Baud rate		bps
Frequency		Hz
Speed Unit		
Wheel circumference		mm
Wheel tops / rev		
Engine tops/rev		

Connector : SubD Male 15 pts

Function / Colour	Description	Pin
Analog Inputs	Channel 1	1
	Channel 2	2
	Channel 3	3
	Channel 4	4
	Channel 5	5
	Channel 6	6
	Channel 7	7
	Channel 8	8
Supply	Supply (6 to 16 V)	9
	0V (GND)	10
	Shield	11
CAN	CAN HIGH	12
	CAN LOW	13
Digital Inputs	Engine Speed	14
	Wheel Speed	15



Front view



Data output

ID	Byte 0	Byte 1	Byte 2	Byte 3	Byte 4	Byte 5	Byte 6	Byte 7
#1 0x03F0	ANA 1		ANA 2		ANA 3		ANA 4	
#2 0x03F4	ANA 5		ANA 6		ANA 7		ANA 8	
#3 0x03F8	Wheel speed		Engine Revs		-		-	

Changing parameters

The device parameters can be modified using the CAN protocol Texys.

CAN parameters:

N°	Parameter	Raw values	values	Comments	
0x00	Baudrate	0x00	1000 Kbps	default	
		0x01	500 Kbps		
		0x02	250 Kbps		
		0x03	125 Kbps		
0x01	Emission frequency	0x00	Rx frame trig	Request mode - 100Hz max.	
		0x01	1 Hz		
		0x02	5 Hz	default	
		0x03	10 Hz		
		0x04	50 Hz		
		0x05	100 Hz		
0x06	200 Hz				
0x02	Rx frame ID	0 to 0x07	0 to 0x07F0	MSB of triggering frame ID	Default
0x03		0 to 0xFF		LSB of triggering frame ID	0x07F0
0x04	Tx1 frame ID	0 to 0x07	0 to 0x07F0	MSB of data frame 1 ID	Default
0x05		0 to 0xFF		LSB of data frame 1 ID	0x03F0
0x06	Tx2 frame ID	0 to 0x07	0 to 0x07F0	MSB of data frame 2 ID	Default
0x07		0 to 0xFF		LSB of data frame 2 ID	0x03F4
0x08	Tx3 frame ID	0 to 0x07	0 to 0x07F0	MSB of data frame 3 ID	Default
0x09		0 to 0xFF		LSB of data frame 3 ID	0x03F8

Digital Input parameters:

0x0A	Speed Unit	0	0.01 mph/bit		Default 1
		1	0.01 kmh/bit		
0x0B	Wheel circumference	300 to 5000	mm	MSB	Default 2000
0x0C				LSB	
0x0D	Wheel tops / rev	1 to 100			Default
0x0E	Engine tops / rev	1 to 100			1

For complete information, contact us at info@texense.com