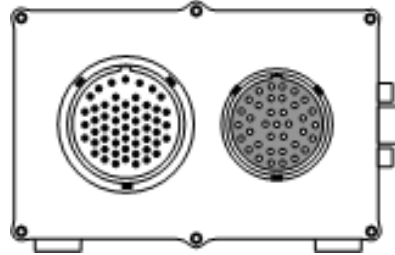


## C5 COMPACT PROGRAMMABLE CONTROL UNIT UP TO 1GBYTE OF REMOVABLE DATA MEMORY 3 CANs, ETHERNET



### Introduction

The MAHTechS C5 Control Unit is suitable for Your most sophisticated and high precision motorsport, Industrial Research & Development applications.

Fast Prototyping in Feedback Controlled Application are allowed.

The optional Removable Compact Flash Card Data Memory can be sized up to 1GBYTE keeping real time data memory for any data analysis.

The MAHTechS TWIN 160MHz DSP Architecture, ensure huge performances even for Your fastest control application.

An optional C++ Programming Pack with the complete C5 System Libraries, enable You to approach even by Yourself the control application software.

Fully software programmable through Ethernet, the device can be equipped also with an optional transponder card system.

3 fully customer programmable CANs port is opening the connection to Your own CAN network.

The technical specifications are as followings:

- Very Powerful TWIN DSP MAHTechS hardware structure
- N°12 16bits 0÷5Volt single ended analogue inputs
- Internal ±5g two axles accelerometer
- N°1 Internal temperature sensor
- N°1 Internal battery voltage
- N°8 frequency type digital inputs for sensors:
  - ABS
  - Inductive
  - Hall



- TTL
- N°1 Lap Timing digital input
- N°11 switch digital inputs
- N°10 High Side Drivers (HSD) 1.5 A digital output (alarm activated)
- N°4 10bits 0.0 to 100.0% Duty Cycle PWM Output
- N°1 Real Time Clock (RTC) for date and time management
- N°3 up to 1Mbit/sec part A&B fully user programmable CAN ports
- N°1 10/100Mbit/sec Ethernet data download and programming port
- N°1 30Mbit/sec MAHTlink expansion port for N°2 Expansion Units
- 8÷32Volt DC power supply
- N°1 removable compact flash card data memory (4MByte÷1GByte)
- N°1 optional transponder system
- N°6 5V 300mA regulated and fused power stages
- N°6 Battery Voltage 800mA fused power stages
- N°2 Autosport/MIL 38999 55/37 pins connectors
- Internal memory for system events data storage (date, time, max temperatures, power on, power off, programming, data download CF removing,...)
- Programmable logging rate up to 1Ks/s per channel
- Powerful C++ Programming Kit including also our MAHT<sup>5-XXX</sup> Setup and Analysis PC Software running under Microsoft® Windows® 2000/NT/XP operating systems
- Compact IP67 anodized aluminium case (90x92x52mm)
- Weight 520gr.

### Specifications

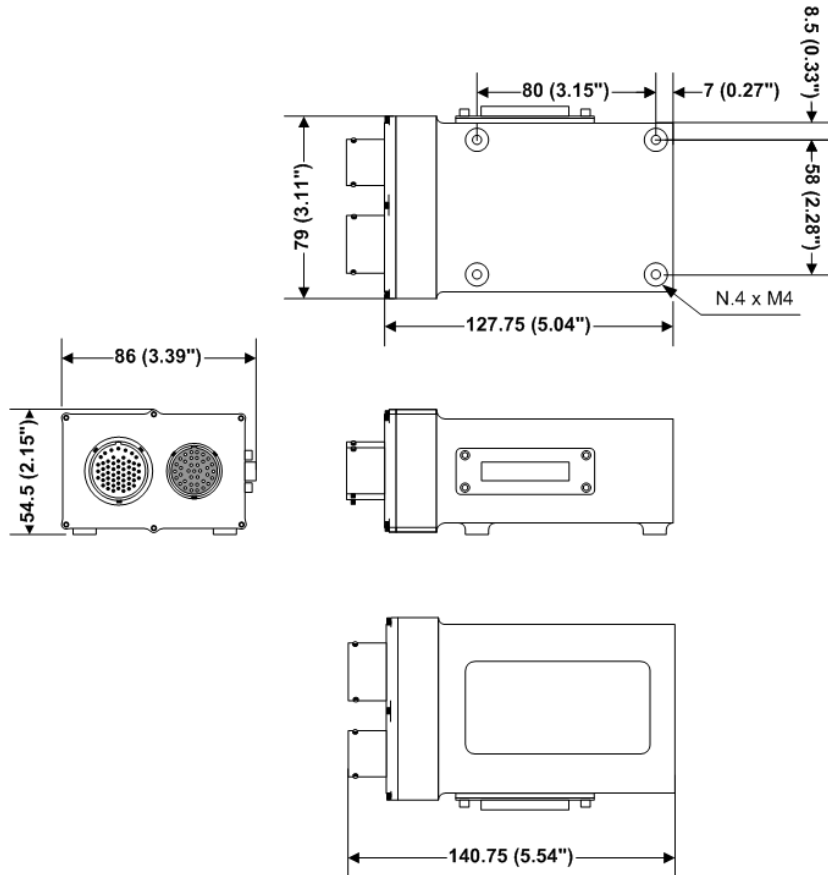
DESCRIPTION	VALUE
Supply Voltage	8÷32Volt DC
Supply Current	280mA@12Volt DC
Operating Temperature Range	- 20 to +70°C (-4 to +158°F)
Storage Temperature Range	- 40 to +85°C (-40 to +185°F)
Weight	520 gr. (18.4 ounces)
Environmental	IP67

### Ordering Information

DESCRIPTION	PART NUMBER
C5 Kit	K 604 001 001 001
C5 Programming Kit + MAHT <sup>5-STD</sup>	K 951 002 001 001
C5 Programming Kit + MAHT <sup>5-PRO</sup>	K 951 003 001 001
C5 Refurbishment	L 604 001 001 001
C5 Link Box Kit	K 612 002 001 001



## Dimensions



Dimensions in millimetres and (inches)

## Connector Information

Connector 1– AS216-35PN Mating Connector AS616-35SN		Connector 2– AS214-35SN Mating Connector AS614-35PN	
PIN	FUNCTION	PIN	FUNCTION
1	Analogue Input 1	1	Analogue Input 10
2	Analogue Input 2	2	Analogue Input 12
3	Analogue Input 3	3	5V Out 5
4	Analogue Input 4	4	Digital GND 6
5	Analogue Input 5	5	PWM Ref. 1
6	Analogue Input 6	6	PWM Ref. 2
7	Analogue Input 7	7	HSD 10
8	CAN1 L	8	HSD 9
9	CAN1 H	9	HSD 8
10	5V Out 1	10	HSD 7
11	5V Out 2	11	HSD 6
12	5V Out 3	12	HSD 5
13	5V Out 4	13	HSD 4
14	Analogue Input 8	14	HSD 3
15	CAN2 L	15	HSD 2
16	CAN2 H	16	HSD 1
17	VBATT Out 1	17	Analogue Input 9
18	Frequency Input 1	18	Analogue Input 11
19	Frequency Input 2	19	NC

20	Frequency Input 3	20	CAN3 H
21	Expansion Port Pin1	21	Switch Input 10
22	Expansion Port Pin2	22	Digital GND 4
23	Serial Rx/Switch Input 6	23	Digital GND 5
24	Serial Tx/Switch Input 5	24	PWM 3
25	VBATT Out 2	25	PWM 1
26	Frequency Input 4	26	VBATT Out 4
27	Frequency Input 5	27	5V Out 6
28	Frequency Input 6	28	NC
29	ETHERNET RX-	29	Analog GND 5
30	ETHERNET TX+	30	Analog GND 6
31	ETHERNET RX+	31	Switch Input 8
32	VBATT Out 3	32	PWM 2
33	Switch Input 1	33	Switch Input 11
34	Switch Input 2	34	Switch Input 7
35	Switch Input 3	35	Switch Input 9
36	Frequency Input 7	36	PWM 4
37	Frequency Input 8	37	CAN3 L
38	Expansion Port Pin3		
39	Expansion Port Pin4		
40	VBATT Out 5		
41	Switch Input 4		
42	Digital GND 1		
43	Analog GND 1		
44	Analog GND 2		
45	Analog GND 3		
46	Analog GND 4		
47	--VBATT HSD Power IN		
48	Digital GND 2		
49	ETHERNET TX-		
50	Digital GND 3		
51	Digital GND 7		
52	Serial GND		
53	--VBATT Power IN		
54	+ VBATT Power IN		
55	+VBATT HSD Power IN		

## MAHTechS Contact

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