

## 32 CHANNEL HIGH PRECISION ANALOGUE EXPANSION UNIT (E5-32A)



### Introduction

The HIGH PRECISION ANALOGUE EXPANSION UNIT is a device to increase the number of analogue channels already available on Your MAHTechS Data Logger.

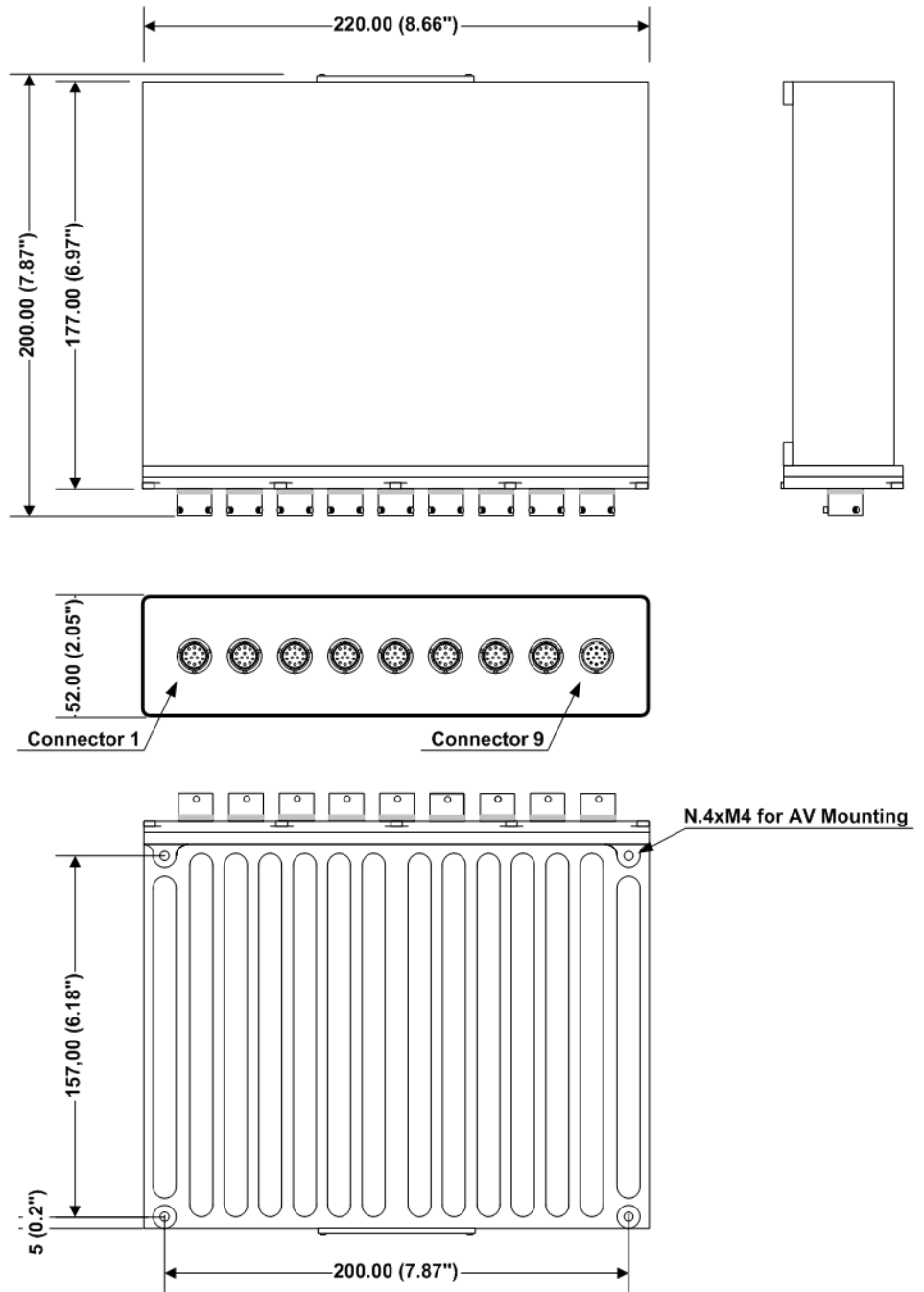
The high precision features are suitable for Your most sophisticated and advanced motorsport or Industrial Research & Development application.

It is possible to perform very accurate, fast and flexible measurements due to the followings technical specifications:

- 24 bits internal resolution
- $\Sigma$ - $\Delta$  analogue conversion with simultaneous sampling
- $\pm 5$ Volt Differential Input
- Internal 3<sup>rd</sup> order programmable anti-aliasing filters
- 1/10/100/1000 internal programmable amplifiers for conditioning of:
  - Strain Gauges
  - K Thermocouple
  - mV/V signals
  - RTD
- Programmable logging rate on each channel up to 1000Hz
- Programmable sensor power stages 2.0 to 10.0Volt DC and 5.0 to 17Volt DC 150mA max each, fuse protected
- 200 $\mu$ A references for PTxxxx sensors
- N°1 30Mbit/sec MAHTLink connection port for M5/M5X Data Logger data transfer
- Full programmability through MAHT-5<sup>xxx</sup> Data Logger Setup Software
- 8-32Volt DC power supply
- Autosport/MIL38999 13 pole connectors
- IP67 anodized aluminium case
- Size 220x52x200mm
- Weight of 1590gr.



**Dimension**



**Dimensions in millimetres and (inches)**

## Connector Information

### Connectors 1 to 4 – AS210-35SN Mating Connector AS610-35PN

PIN	FUNCTION	CONNECTOR	1	2	3	4
1	0-10V Programmable Power Output		1	3	5	7
2	0-10V Programmable Power Output		2	4	6	8
3	+Analogue Input		1	5	9	13
4	– Analogue Input		1	5	9	13
5	+Analogue Input		2	6	10	14
6	– Analogue Input		2	6	10	14
7	+Analogue Input		3	7	11	15
8	– Analogue Input		3	7	11	15
9	+Analogue Input		4	8	12	16
10	– Analogue Input		4	8	12	16
11	Power Ground		1	3	5	7
12	Power Ground		2	4	6	8
13	200µA RTD Reference					
Scr	Connected					

### Connectors 5 to 8 – AS210-35SN Mating Connector AS610-35PN

PIN	FUNCTION	CONNECTOR	5	6	7	8
1	5-17V Programmable Power Output		9	11	13	15
2	5-17V Programmable Power Output		10	12	14	16
3	+Analogue Input		17	21	25	29
4	– Analogue Input		17	21	25	29
5	+Analogue Input		18	22	26	30
6	– Analogue Input		18	22	26	30
7	+Analogue Input		19	23	27	31
8	– Analogue Input		19	23	27	31
9	+Analogue Input		20	24	28	32
10	– Analogue Input		20	24	28	32
11	Power Ground		9	11	13	15
12	Power Ground		10	12	14	16
13	200µA RTD Reference					
Scr	Connected					

### Connector 9 – AS210-35PN Mating Connector AS610-35SN

PIN	FUNCTION
1	+ Battery Voltage
2	Expansion Port 1
3	Expansion Setting
4	Expansion Setting Reference
5	NC
6	NC
7	NC
8	– Battery Ground
9	– Battery Ground
10	+ Battery Voltage
11	Expansion Port 2
12	Expansion Port 4
13	Expansion Port 3
Scr	Connected



## Specifications

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DESCRIPTION	VALUE
Supply Voltage	8 to 32Volt DC
Supply Current	710mA@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	1590gr. (56.1 ounces)
Environmental	IP67

## Ordering Information

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DESCRIPTION	PART NUMBER
32 Channel Expansion Unit	K 605 00D 001 001

## MAHTechS Contact

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