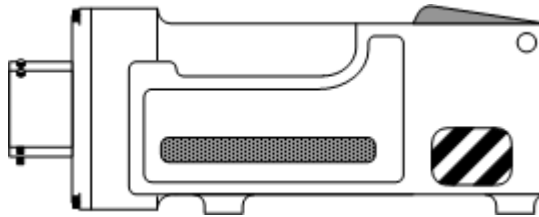


**M5X
 COMPACT and POWERFUL DATA LOGGER
 UP TO 1GBYTE OF REMOVABLE DATA MEMORY
 UP TO 76 ANALOGUE CHANNELS
 3 CAN BUSES, ETHERNET
 FULLY WATERPROOF CONSTRUCTION**



Introduction

The MAHTechS M5X Data Logger is suitable for Your most sophisticated and high precision Motorsport, Industrial Research & Development and Testing applications.

The Removable Compact Flash Card Data Memory up to 1Gbyte can be used, ensuring a very short data downloading time.

A sophisticated door is able to guarantee the IP67 environmental specification giving the possibility to quickly remove the compact flash card.

Available in Standard Version for low cost applications and Professional Version for the most complete installation.

Flexible and fully programmable via Ethernet connection. The device can be equipped with an optional memory locker transponder activated. This enables the user to track memory card access.

3 User programmable CAN buses port is opens up connectivity to Your own CAN network.

Expansion port enables expansion up to 76 analogue channels.

Password and Data Encryption provide security to a Users private data memory.

The technical specifications are as follows:

- Very Powerful TWIN DSP MAHTechS hardware structure
- N°12 16bits 0-5Volt single ended analogue inputs, expandable through Expansion Units giving a further 64 analogue channels (24bits resolution, ± 5 Volt differential input with internal programmable amplifier for sensor conditioning and programmable sensor voltage)



- Internal ±5g two axis accelerometer
- N°1 Internal temperature sensor
- N°1 Internal battery voltage channel
- N°8 frequency type digital inputs for sensors:
 - ABS
 - Inductive
 - Hall
 - TTL
- N°1 Lap Timing digital Input
- N°6 switch digital inputs
- N°4 High Side Drivers (HSD) 1.5 A digital output (alarm activated)
- N°1 Real Time Clock (RTC) for date and time management
- N°3 up to 1Mbit/sec part A&B fully user programmable CAN bus ports
- N°1 10/100 Mbit/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 compact flash card locker system (card transponder activated)
- N°6 5V 300mA regulated and fused power stages
- N°5 Battery Voltage 800mA fused power stages
- N°2 Autosport/MIL 38999 55 and 37 pins connectors
- Internal memory for system events data storage (date, time, max temperatures, power on, power off, programming, data download CF removal,...)
- Programmable logging rate up to 1Ks/s per channel
- Powerful MAHT^{5-XXX} Setup and Analysis PC Software running under Microsoft® Windows® 2000/NT/XP operating systems
- Compact IP67 anodized aluminium case (90x54.5x127.75mm)
- Weight 610gr.

Specifications

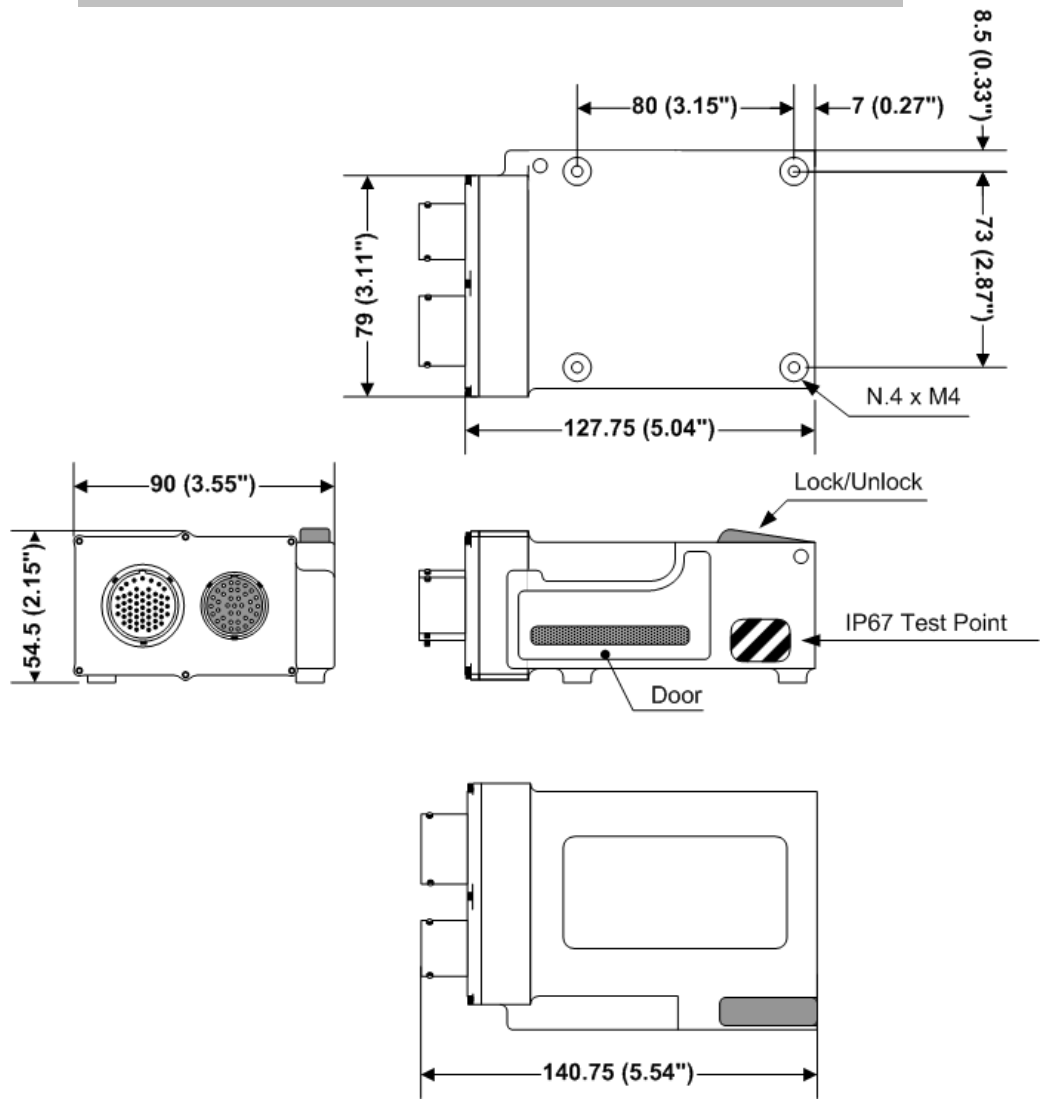
DESCRIPTION	VALUE
Supply Voltage	8 to 32Volt DC
Supply Current	320mA@12Volt DC
Operating Temperature Range	- 20 to +70°C (-4 to +158°F)
Storage Temperature Range	- 40 to +85°C (-40 to +185°F)
Weight	610 gr. (21.2 ounces)
Environmental	IP67

Ordering Information

DESCRIPTION	PART NUMBER
M5X-STD Kit	K 600 003 001 001
M5X-PRO Kit	K 600 004 001 001
M5X-STD to M5X-PRO Upgrade	L 600 002 001 001
M5X-XXX Refurbishment	L 600 001 001 001
M5X-XXX Link Box	K 612 001 001 001

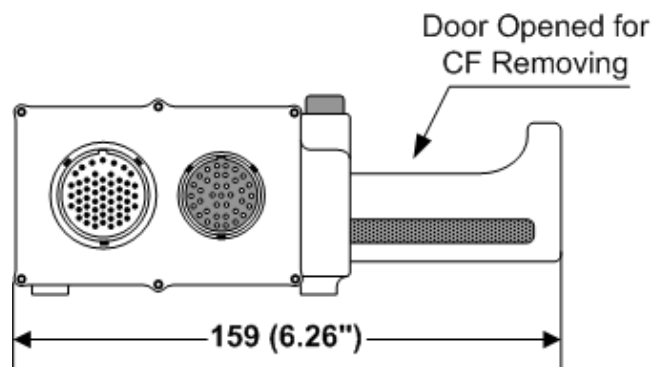


Dimensions



Dimensions in millimetres and (inches)

Dimension during Compact Flash Removal



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	Reserved
6	Analogue Input 6	6	Reserved
7	Analogue Input 7	7	Reserved
8	CAN1 L	8	Reserved
9	CAN1 H	9	Reserved
10	5V Out#1	10	Reserved
11	5V Out#2	11	Reserved
12	5V Out#3	12	Reserved
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	Reserved
22	Expansion Port Pin2	22	Digital GND #4
23	Switch Input 6	23	Digital GND #5
24	Switch Input 5	24	Reserved
25	VBATT Out#2	25	Reserved
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	Reserved
32	VBATT Out#3	32	Reserved
33	Switch Input 1	33	Reserved
34	Switch Input 2	34	Reserved
35	Switch Input 3	35	Reserved
36	Frequency Input 7	36	Reserved
37	Frequency Input 8	37	CAN3 L
38	Expansion Port Pin3		
39	Expansion Port Pin4		
40	Beacon Power Out		
41	Beacon Input		
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	Beacon GND		
52	Digital GND #7		
53	--VBATT Power IN		
54	+ VBATT Power IN		
55	+VBATT HSD Power IN		

Legend: **xxxx** Present only in PRO Version
 CAN1 In STD Version only for Display
 CAN2 In STD Version not Programmable

MAHTechS Contact

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