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EDGE PERFORMANCE Edge Performance Can Converter "EPCC"

Installation Manual



When Performance Meets Perfection And Reliability.

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A WARNING

Read and fully understand operator's manual before using this machine. Failure to follow operating instructions could result in death or serious injury.



1) General Overview

The "EPCC" is a small, compact, and intelligent unit that has been designed in order to simplify integration between the engine and EIS/EFIS systems. The EPCC converts our ECU's CAN-BUS data protocol into the Rotax iS (CAN AEROSPACE) protocol which enables the EIS / EFIS systems developed for the Rotax iS engines to display live engine data. As of today (12/2023) we have only verified its compatibility with Garmin G3X Touch. But it should be compatible for Dynon etc.

2) <u>Functionality</u>

As mentioned in the introduction, the EPCC is primarily a CAN BUS signal converter. As per today (12/2023) this is its sole purpose, but in the future, it may allow SLPC (Single Lever Pitch Control) and engine data logging. It has a DB9 D-SUB connector and a MicroSD card for flashing of the software.

3) Software Update

The EPPV allows for easy conduction of software updates through the SD memory card interface. The software is delivered in compressed .zip-files with the following exemplary structure:

eppc_v1.0.zip -> epcc.bin

The binary software upgrade file (epcc.bin) has to be copied on the microSD card. The microSD card has to be placed inside the microSD card slot. The binary file is recognized by the EPCC when power is applied, and the device boots up. When an update file is detected, the content is automatically programmed into flash memory and the device starts up using the new software. Upon successful firmware update, the binary file is deleted from the microSD. If you need to do another firmware update, you have to follow the same procedure as above.

Please ensure every step before flashing.

- Use a microSD card with max. 128 GB
- Make sure to format the microSD card in FAT32 format (exFAT/NTFS is not supported!)
- Ensure the microSD card is empty
- Request the latest software file from Edge Performance
- Do not rename the firmware file

Flashing mechanism:

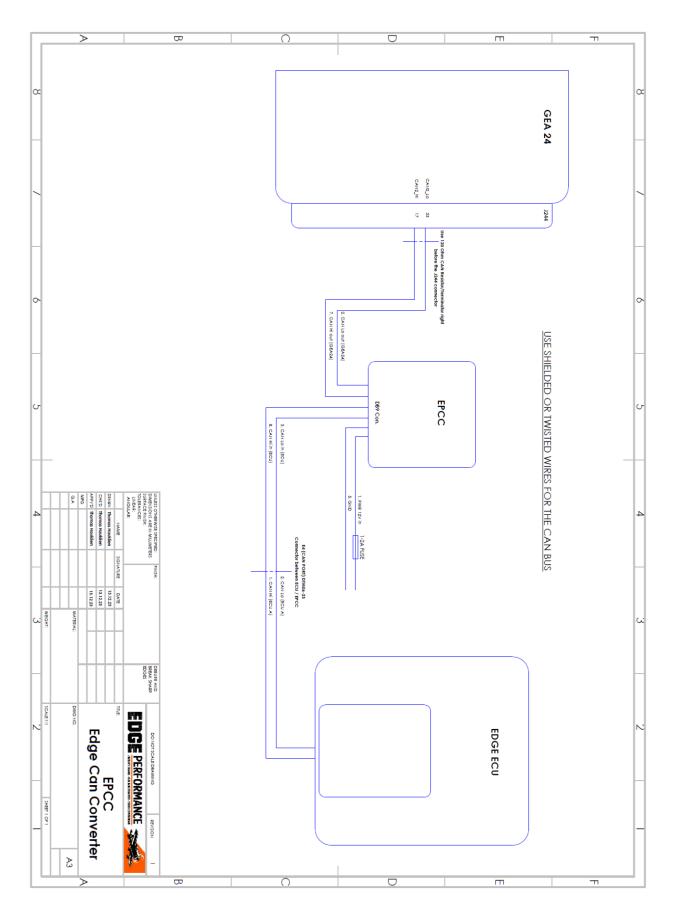
• Power off the EPCC

- Insert the microSD card into the slot
- Power on the EPCC

4) Technical data

	EPCC Technical Dato
Dimensions (width, height,	69.1 x 32.0 x 54.0 mm 2.72 x 1.26 x 2.13 in
depth) Mounting Depth excl.	74.0 mm 2.91 in
connectors	4 screws x M4 Pattern 39.1 mm x 66.5 mm
Mounting	0.25 kg 0.55 lbs
Total Mass	Machined Aluminum, surface blue anodized
Housing	9 to 32 Volts DC, according to EN2282
Supply	typ. 1.2 W (0.1 A at 14 V, 0.08 A at 28 V)
Voltage	STM32 Microcontroller, High precision RTC
Power	microSD card, up to 128 GB, FAT32 formatted
Consumption	Single front mounted SD/SDHC-Card, up to 128 GB, FAT32 formatted
Electronics	-20 to +70 °C -4 to +158 °F
Firmware Update	< 7,620 m < 25,000 ft
Storage	< 95 %, non-condensing

5) Wiring Diagram



6) **Dimensions & Section Views**

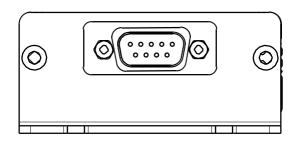


Figure 4-1: iS Data Recorder (front view)

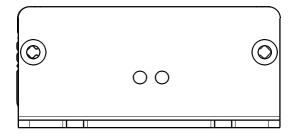


Figure 4-2: iS Data Recorder (rear view)

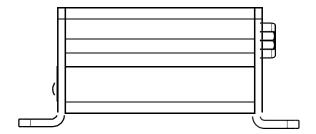
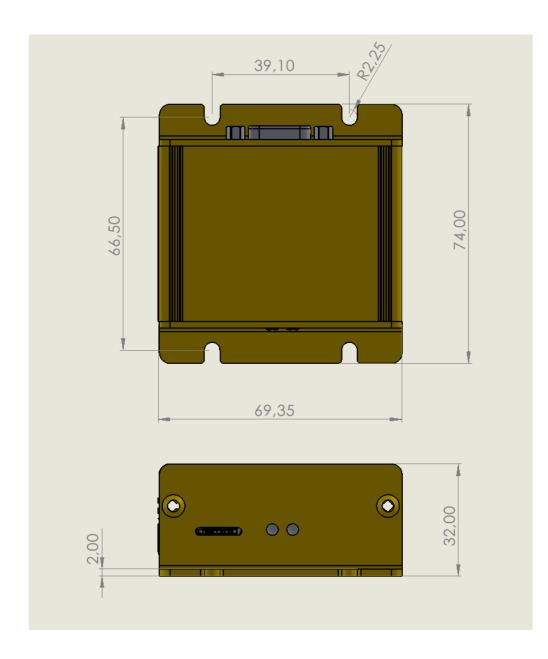


Figure 4-3: iS Data Recorder (side view)



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