

Electronic Control Unit

PMP3:MFECU

version	Date	Description	Author
1.0	2020.06.05	New Document	A. Rebello
1.1	2020.06.11	Reviewed – final version of short description	A. Rebello
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PMP3:MFECU

1 Device description

Hella has developed a product for 2-Wheeler automotive application, which is known as MFECU. This document is to describe the MFECU intended for use in automotive system. This product is designed around ARM series of controller, also it has wireless communication features implemented in it.

MFECU is using wireless technology in its features.

Product Name:	MFECU
Brand name:	Hella
Model Code:	PMP3
Rated voltage:	12V battery type
Battery details:	Li-ion battery/12V/Capacity
Bluetooth version:	4.1

Table 1: General Description of MFECU

2 Application

Multi-Functional ECU (MFECU) is Bluetooth connectivity solution for the 2-wheeler application. It will be connected to smart phones through BLE. It will provide following functions to the user

- Vehicle information such as chassis number, vehicle model, registration number
- Features such as find me, follow me, panic alert, locate me.

3 PMP3:MFECU pictures

These following photographs show the exterior and interior view of the Multi-Functional ECU (MFECU).



Picture 1: Normal Working Sample top view



Picture 2: Normal Working Sample bottom view

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3.1 Product operational description

PMP3:MFECU product is designed around 32bit series of microcontroller. This 12V battery operated device designed for 2-Wheeler Automotive application. This device uses Bluetooth technology for wide band data transmission. Some key features about product are highlighted here.

- Device has 20 pin connectors to communicate with outside devices
- Device has provision for CAN and LIN communication
- Device communicate with cluster unit of vehicle through CAN communication
- Device has provision for 4 digital, 1 Analog and 1 PWM input provision
- Device has provision for 6 digital output in which each output can be operated at 2.5A load MAX, it directly communicates with load like horn, headlamp etc.
- Devices communicate with other Bluetooth device like Mobile phone, Headphones via Bluetooth technology

4 Manual Statement

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the

following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

The device must not be co-located or operating in conjunction with any other antenna or transmitter.

4.1 RF warning for Mobile device:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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To whom it may concern,

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User Manual Statement

FCC ID: 2AWK2PMP3 IC:

FCC §15.19 Labelling Requirement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

FCC §15.19 Information to user

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The above mentioned statements and paragraphs will be placed in a prominent location in the final user manual.

Ameya Gambhir

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