

# Magneti Marelli REX-140 Engine Control Unit

**Brand:** Magneti Marelli  
**Product Code:** REX-140  
**Availability:** 7 Days  
**Weight:** 1.00kg  
**Dimensions:** 20.00cm x 15.00cm x  
10.00cm  
**Call for Price:** +613-8743-5550



## Short Description

### **All-in-one ECU with internal Data Logger**

REX-140 Engine and Vehicle Control Unit is a powerful and complete concentrated system capable of controlling medium/low performance engines up to 4 cylinders. Suitable for motorbike applications.

## Description

Based on a dual-core microcontroller (one for engine and vehicle control and one for data logging), the unit is a powerful and compact system capable of controlling medium and low-performance motorbike engines of up to 4 cylinders.

Specifically designed for motorcycle racing applications, its 112-pin connectors allow the internal data acquisition unit to drive up to 8 injectors, 4 ignition coils and a number of additional loads, and it is provided with a three-axis accelerometer and a temperature sensor to monitor mechanical and thermal stress.

The internal logger has a capacity of 1 GByte memory and the logging core is able to manage a wide range of data types and up to 256 channels at frequencies of between 1 and 1000 Hz.

The unit represents a single all-in-one system that includes data logger and lambda sensors in a single compact case, reducing complexity and weight while increasing performance. It is the official Engine Control Unit for the Moto2 Championship for the 2019-2021 seasons.

### **Technical Details**

Analogue Single-Ended (@12 Bit Resolution): 16

NTC- PT1000 Internal Temperature Sensor: 4

NTC Internal Temperature Sensor: 2

Lambda UEGO (@12 Bit Resolution): 2

Injector Rail Supply (@12 Bit Resolution): 1

VRS, Hall-Effect Inputs: 2

Hall Or Rate Inputs: 4

ON-OFF Digital Input: 5

“Code Load” Enable Pin: 1

Inductive Coil Drivers (Up To 20 A): 4

ON-OFF Injector Drivers (Up To 3 A): 8

Lambda Heater (Up To 3 A): 2

Half-Bridge Driver (Up To 5-7 A Peak): 3

PWM Low Side Drivers (Up To 3 A): 2

Voltage References (5 V, 70 MA): 3

CAN Line (1 Mbit/S Or Lower): 2

Ethernet Line (100 Mbit/S): 1

Micro 32 Bit PowerPC Dual Core CPU @264 MHz Strategy, Data Logging,

Communication And Actuation Microcontroller: 1

Flash EEprom Memory (X32 Internal): 8 GByte

SRAM (X32 Internal): 512 kByte

Synchronous SRAM (X32 External): 4 MByte

BENAND Flash Disk: 1 GByte

Time Keeper: 1

Flash Disk Memory: 1 GByte

Logged Channels: Up to 256

Logging Rate: Up to 100 kByte/s

Sampling Rate: Up to 1 kHz

Power Supply: 8 to 16 V

Operating Temperature Range (Internal): -20 to 85 °C

Temperature Range During Data Download: 0 to 70 °C

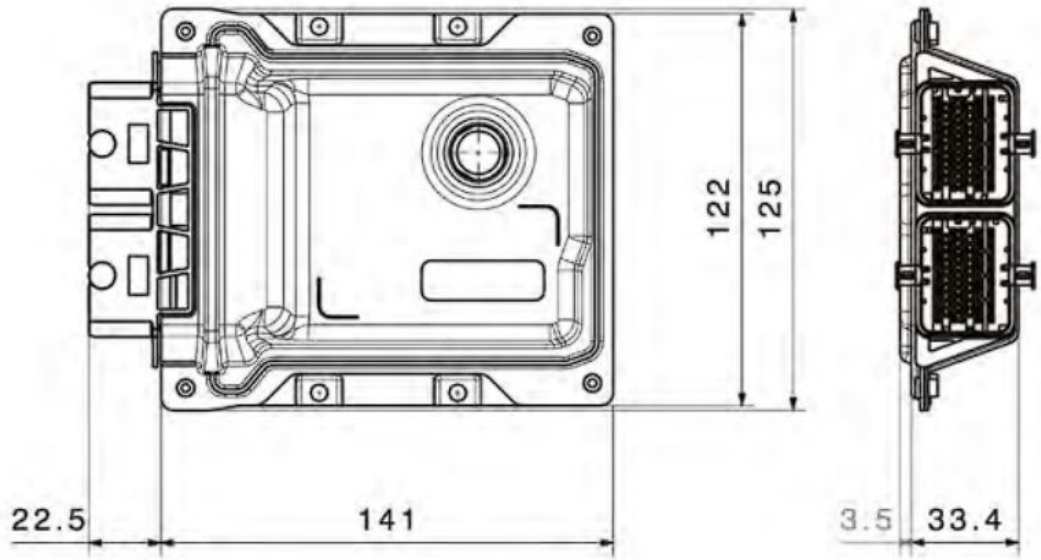
Temperature Range During Data Download: 0 to 70 °C

Protection Class: IP65

Dimensions Without Connectors: 122\* x 141 x 36.9 (max) mm

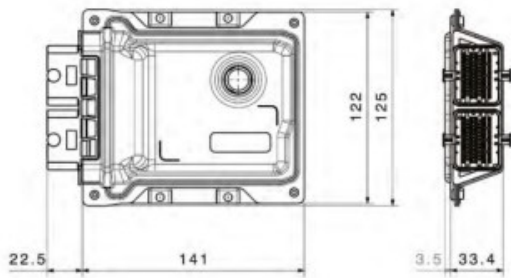
Weight (Approx.): 325 g

## **Technical Drawing**



Dimensions in millimeters.

## Product Gallery



Dimensions in millimeters.