

# Magneti Marelli SRA-E R02 Engine Control Unit



**Brand:** Magneti Marelli  
**Product Code:** SRAE  
**Availability:** 7 Days  
**Weight:** 0.50kg  
**Dimensions:** 20.00cm x 15.00cm x 5.00cm

**Price: \$2,750.00**

## Short Description

SRA-E is a dedicated Engine Control Unit. A single unit can drive up to eight injectors and six ignition coils. SRA-E can also drive logic command coils or dumb coils without the need for external ignitors (SW option).

## Description

SRA-E provides analogue inputs for single-ended, differential, temperature and knock-sensor as well as an interface for a switching lambda sensor. The unit also provides an H-Bridge output stage for use with suitable "Drive by Wire" actuators.

6 configurable speed sensor inputs (inductive or Hall) provide full flexibility of configuration for engine angle detection as well as other frequency inputs such as wheel or shaft speed.

SRA-EDL16 is a version of the SRA-E with an internal 16 Mbyte data logger.

Communication from the PC based configuration tool (Vision 5) and to other units (such as dashboard and logger) is by the 2 CAN lines and an asynchronous serial line.

Inside the unit there is a high performance RISC microcontroller and an FPGA for diagnostic purposes.

SRA-E is supplied with the mating connector (loom side) or Competition Systems can make a custom harness for you at extra cost.

## Main Features

- 8 Single-ended
- 6 Pick-ups or Hall effect
- 6 Inductive or logic command ignition drivers (SW option)
- 8 On/Off injector drivers
- 1 H-Bridge: DC-Motor driver for “Drive by Wire” control
- 4 PWM (Current controlled PWM)
- 1 On/Off or Linear Lambda sensor
- 2 Knock input for detonation control accelerometers
- 2 CAN communication buses
- 1 Ethernet line

## Technical Characteristics

### Inputs

Analogue Single-ended .....	8
On/Off or Linear Lambda sensor .....	1
Knock sensor (multiplexed).....	2
K-type thermocouple.....	2
NTC/PT1000 temperature sensor (selectable) .....	4
NTC internal temperature sensor .....	1
V battery injector .....	1
VR Pick-ups or Hall effect .....	6
On/Off digital .....	6
Lap Trigger.....	1
“Code Load” enable pin .....	1

### Outputs

On/Off injector drivers .....	8
Inductive or logic command ignition drivers (SW option)..	6
H-Bridges .....	1

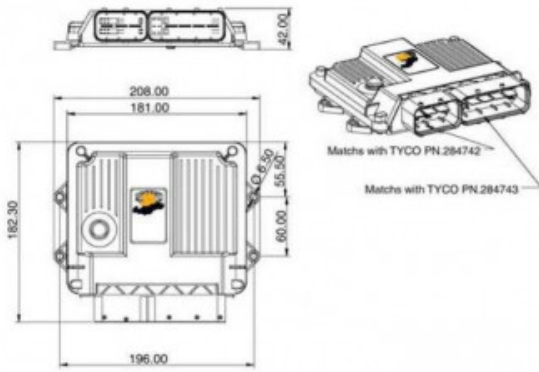
Lambda heater drivers .....	1
PWM.....	4
Low-side On/Off .....	2
Voltage references.....	2
Communications	
CAN line (1 Mbit/s (*)) .....	2
Ethernet line (100 Mbit/s).....	1
Serial current loop.....	1
(*) Configurable on request	
Logic Core	
Microcontroller (80 MIPS RISC).....	1
FPGA (50k gates) .....	1
Flash E2PROM (microcontroller).....	1 Mbyte
RAM memory (microcontroller) .....	48 Kbyte
RAM memory.....	512 Kbyte
E2PROM parallel .....	64 Kbyte
E2PROM serial .....	4 Kbyte
Time keeper.....	1
Other Characteristics	
Power supply .....	6 to 16 V
Operating temperature range (internal) .....	-20 to 85 °C
Protection class.....	IP 65
Dimensions	
with connectors.....	208 x 182.30 x 42 mm
Weight (approx.) .....	960 g

## Specification

Make	
Alfa Romeo	

## Product Gallery

## Dimensions



## Application Schematics

