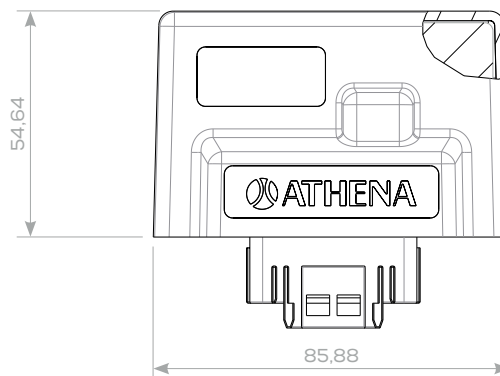
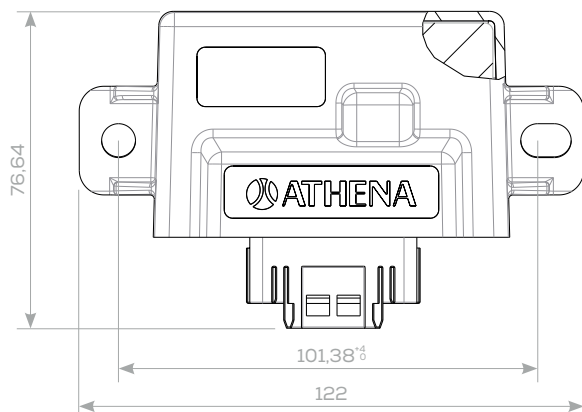


## ST 39 ECU



**S-SERIES** is the engine control units' family, developed by Athena's electronic division for the complete management of the EFI engines. This platform is extremely flexible and subjected to strict validation tests, based on Automotive standards.

### PERFORMANCE SPECS

Connector	39 Ways JAE p/n MX47039SF1
Cylinders	2
Ignition coils	2
Application	2 strokes / 4 strokes
Injectors	saturated
Operating Voltage	8V – 16V
Operating Temperature range	- 40°C + 85°C
Storage Temperature range	- 40°C + 105°C
Waterproof and Dust proof	
CAN BUS communication	
Euro 5 – BS VI	compliant
OBD II	compliant
ISO 26262	ready
REACH and ROHS	compliant



## / STRATEGIES

### EMISSION RELATED

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Fine Cranking and Flare Control

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CAT Light-Off Control

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Advanced PI Lambda Closed Loop

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Cut-Off Control

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IACV Idle Speed Closed Loop Control

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Ignition Idle Speed Closed Loop Control

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Alpha-N, Speed Density or Hybrid Control

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### LEARNING FUNCTIONS

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Long Term Self Adjustment (Self Learning)

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O-TPS Learning

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IACV Learning

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### SPECIAL FUNCTIONS

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ISG Support Control

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Baro reading from Map Sensor

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Oil Sensor Control

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Safety Strategies for Start Control

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Advanced Rev Limiter

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Cooling Fan Safety Control

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Dual maps

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GPA Traction Control

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## DIAGNOSTICS

ISO 15765 (description of the physical interface via CAN)

ISO 14229 (description of the services, UDS)

OBD stage I & Stage II

Misfire detection

History Report

Hour Meter with Total and Partial working time

## / VALIDATION

### EMC TEST

Radiated Emission	according to CISPR25
Conducted Emission of Power line	according to CISPR25
Radiated Immunity	according to ISO 11452-4 and ISO 11452-2
ESD	according to ISO 10605
Electrical transient (Pulse 1, 2a, 2b, 3a, 3b, 4)	according to ISO 7637 - 2

### ENVIRONMENTAL RELIABILITY TEST

Thermal	According to ISO 16750-4
Mechanical	According to ISO 16750-3
Road conditions	According to ISO 16750-5 and ISO 20653

<b>ELECTRICAL PERFORMANCE TEST</b>	According to ISO 16750-2
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